

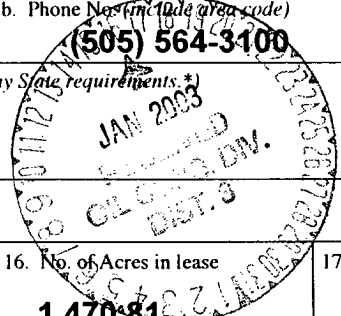
UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

RECEIVED

2002 OCT 23 PM 1:25

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMSF-079065
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 N/A
2. Name of Operator RICHARDSON OPERATING CO.		7. If Unit or CA Agreement, Name and No. N/A 31057
3a. Address 3100 LaPLATA HIGHWAY FARMINGTON, NM 87401	3b. Phone No. (include area code) (505) 564-3100	8. Lease Name and Well No. F-RPC 29 #2
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1345' FNL & 1115' FWL At proposed prod. zone SAME		9. API Well No. 30-045- 31242
14. Distance in miles and direction from nearest town or post office* 2 AIR MILES SW OF FARMINGTON		10. Field and Pool, or Exploratory WEST KUTZ PICTURED CLIFFS
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1,115'	16. No. of Acres in lease 1,470.81	11. Sec., T., R., M., or Blk. and Survey or Area 29-29n-13w NMPM
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. 2,044'	19. Proposed Depth 1,400'	12. County or Parish SAN JUAN
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5,458' GL	22. Approximate date work will start* NOVEMBER 15, 2002	13. State NM
17. Spacing Unit dedicated to this well 160 ACRES (NW4)-PC 320 W/2 FC		
20. BLM/BIA Bond No. on file #158293308 (BLM - NATIONWIDE)		
23. Estimated duration 2 WEEKS		
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

**On site inspection with Roger Herrera
Notice of Staking filed as "RPC 29 2"
Archaeology report LAC 2002-15g filed 9-9-02**

This action is subject to technical and procedural review pursuant to 43 CFR 3165.9 and appeal pursuant to 43 CFR 3165.4

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

cc:BLM (&OCD), Richardson

25. Signature 	Name (Printed/Typed) BRIAN WOOD	Date 10-20-02
Title CONSULTANT PHONE: 505 466-8120 FAX: 505 466-9682		
Approved by (Signature) 	Name (Printed/Typed) David J. Mankiewicz	Date JAN 14 2003
Title Office		

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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.

RECEIVED

2003 JAN -6 AM 9:29

5. Lease Serial No.
NMSF-079065

6. If Indian, Allottee or Tribe Name
N/A

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

8. Well Name and No.
F-RPC 29 #2

9. API Well No.
30-045-31242

10. Field and Pool, or Exploratory Area
W Kutz PC & Basin Fr. Coal

11. County or Parish, State
SAN JUAN COUNTY, NM

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well
 Oil Well Gas Well Other

2. Name of Operator
Richardson Operating Co.

3a. Address
**3100 LaPlata Highway
Farmington, NM 87401**

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

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)
**SURFACE: 1345' FNL & 1115' FWL 29-29n-13w
BHL: SAME**

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 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.)

Due to NMOCD's new Basin Fruitland coal rule, will also complete well in Fruitland coal. Stand up 320 dedicated to Basin Fruitland coal.



cc: BLM, Jones

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 **11-3-02**

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by **/s/ David J. Mankiewicz** Title _____ Date **JAN 14 2003**

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 _____

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.

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

Form C - 102

EXTENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

ARA Number 30-045-31242	Pool Code 71629	Pool Name Basin Fruitland Coal
Property Code 31057	Property Name FRPC 29	Well Number 2
OGRID No. 019219	Operator Name RICHARDSON OPERATING COMPANY	Elevation 5458'

Surface Location

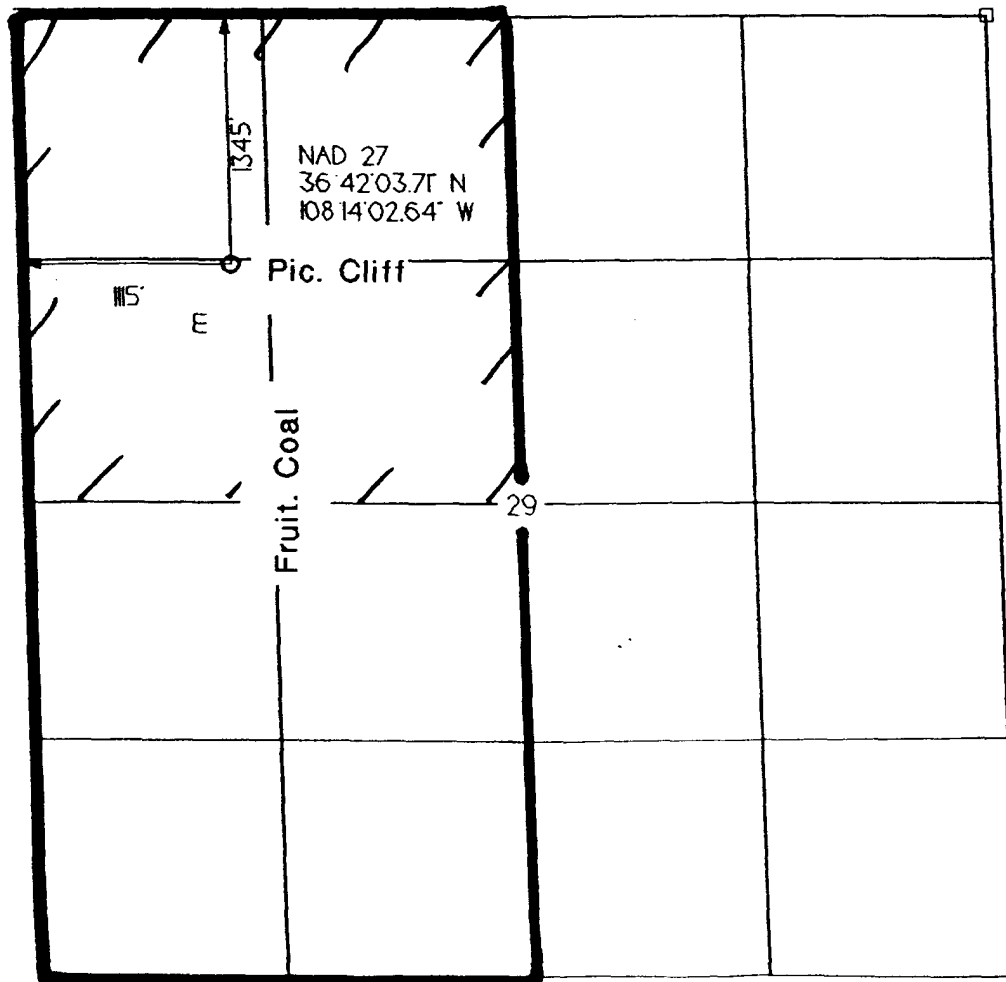
UL or Lot	Sec.	Typ.	Rgn.	Lot Idh.	Feet from >	North/South	Feet from >	East/West	County
E	29	29 N.	13 W.		1345'	North	115'	WEST	SAN JUAN

Bottom Hole Location if Different From Surface

UL or Lot	Sec.	Typ.	Rgn.	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 *B. Wood*
 Printed Name **BRIAN WOOD**

Title **CONSULTANT**

Date **Nov. 3, 2002**

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 **22 AUGUST 2002**

Signature *G. Wood*
 Professional Surveyor

GERALD G. WOOD, P.E.
 6844
 REGISTERED LAND SURVEYOR

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

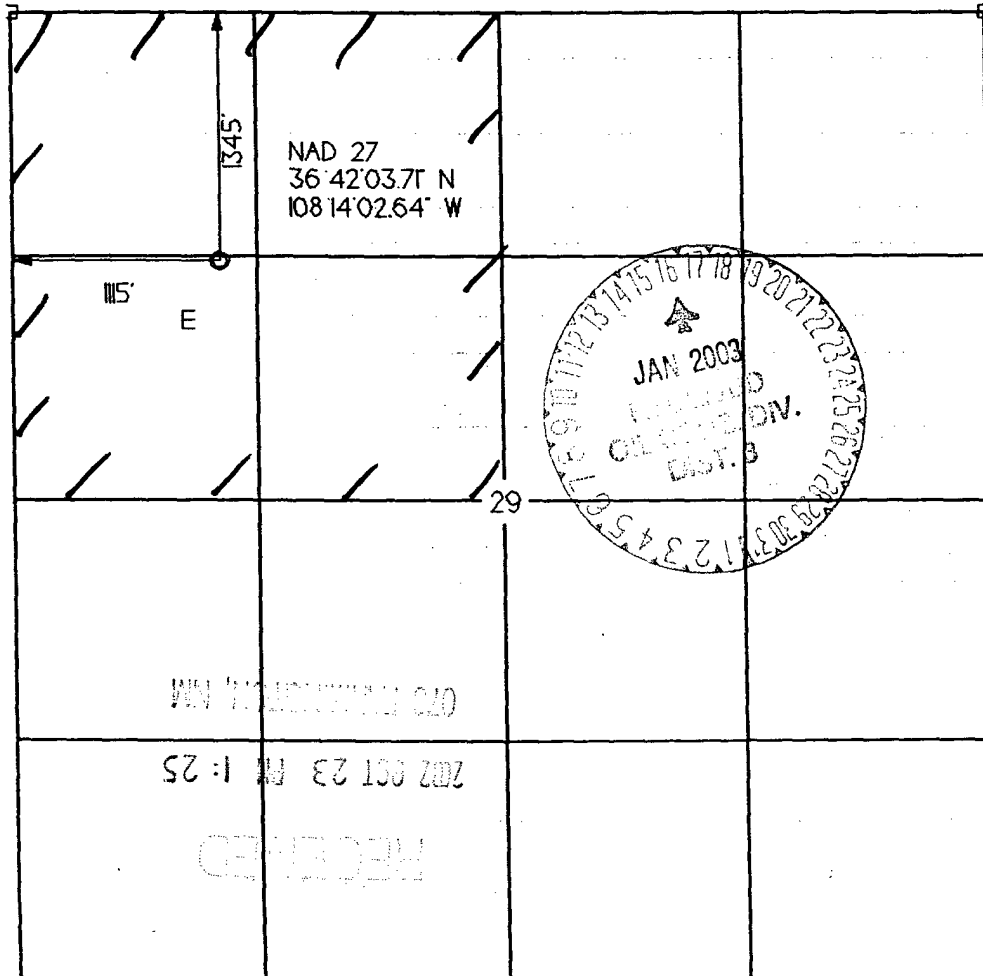
ARA Number 30-045-31242	Pool Code 79680	Pool Name WEST KUTZ PICTURED CLIFFS
Property Code 31057	Property Name FRPC 29	Well Number 2
OGRD No. 019219	Operator Name RICHARDSON OPERATING COMPANY	Elevation 5458'

Surface Location									
UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	Feet from >	North/South	Feet from >	East/West	County
E	29	29 N.	13 W.		1345'	North	1115'	WEST	SAN JUAN

Bottom Hole Location if Different From Surface									
UL or Lot	Sec.	Twp.	Rge.	Lot Idn.	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



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: **OCT. 20, 2002**

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: **22 AUGUST 2002**

Signature and Seal of Professional Surveyor: *C. J. Doleston*

Richardson Operating Co.
F-RPC 29 #2
1345' FNL & 1115' FWL
Sec. 29, T. 29 N., R. 13 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>
Kirtland Shale	000'	5'	+5458'
Fruitland Fm	858'	863'	+4,600'
Pictured Cliffs Ss	1,168	1,173'	+4,290'
Total Depth (TD)*	1,400'	1,405'	+4,058'

* all elevations reflect the ungraded ground level of 5,458'

2. NOTABLE ZONES

<u>Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zones</u>
Fruitland	Fruitland	Fruitland
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 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.
F-RPC 29 #2
1345' FNL & 1115' FWL
Sec. 29, T. 29 N., R. 13 W.
San Juan County, New Mexico

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 415 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	1,400'

Surface casing will be cemented to surface with \approx 36 cu. ft. (\approx 30 sacks) Class B + 2% CaCl₂. Volume is based on 100% excess, yield of 1.18 cu. ft./sk, and slurry weight of 15.6 PPG. 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. Forty barrels of fresh water will next be circulated. Lead with \approx 170 cubic feet (\approx 83 sacks) of Class B with 2% metasilicate (yield = 2.06 cubic feet per sack, slurry weight = 12.5 pounds per gallon). Tail with \approx 110 cubic feet (\approx 93 sacks) of Class B with 2% CaCl₂ (yield = 1.18 cubic feet per sack, slurry weight = 15.6 pounds per gallon). Total cement volume is \approx 280 cubic feet 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. Seven centralizers will be spaced on every other joint starting above the shoe. Seven turbolizers will be placed on every other joint starting from the top of the well.