

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

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

RECEIVED

5. Lease Serial No.

NMSF-079065

6. If Indian, Allottee or Tribe Name

N/A

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

N/A

8. Lease Name and Well No.

F-RPC 29 #4

9. API Well No.

30-045-31281

10. Field and Pool, or Exploratory

W KUTZ PC & BASIN FRUIT COAL

11. Sec., T., R., M., or Blk. and Survey or Area

P 29-29n-13w NMPM

12. County or Parish

SAN JUAN

13. State

NM

1a. Type of Work: ☒ DRILL ☐ REENTER

1b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone

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 (Report location clearly and in accordance with any State requirements.)*

At surface **730' FSL & 745' FEL**

At proposed prod. zone **SAME**

14. Distance in miles and direction from nearest town or post office*
2 AIR MILES SSW OF FARMINGTON

15. Distance from proposed*
location to nearest
property or lease line, ft.
(Also to nearest drig. unit line, if any) **730'**

16. No. of Acres in lease

1,470.81

17. Spacing Unit dedicated to this well

PC: 160 AC. (SE4) COAL: 320 AC. (E: 2)

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. **3,570'**

19. Proposed Depth

1,600'

20. BLM/BIA Bond No. on file

#158293308 (BLM - NATIONWIDE)

21. Elevations (Show whether DF, KDB, RT, GL, etc.)

5,830' GL

22. Approximate date work will start*

JANUARY 2, 2003

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.
2. A Drilling Plan.
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).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
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 4"**

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

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

cc:BLM (&OCD), Richardson

25. Signature		Name (Printed/Typed)	BRIAN WOOD	Date	12-7-02
Title	CONSULTANT	PHONE: 505 466-8120	FAX: 505 466-9682		
Approved by (Signature)		Name (Printed/Typed)	JAN 2 2003		
Title	h/V.R. Balderaz	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.

MMOCD

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

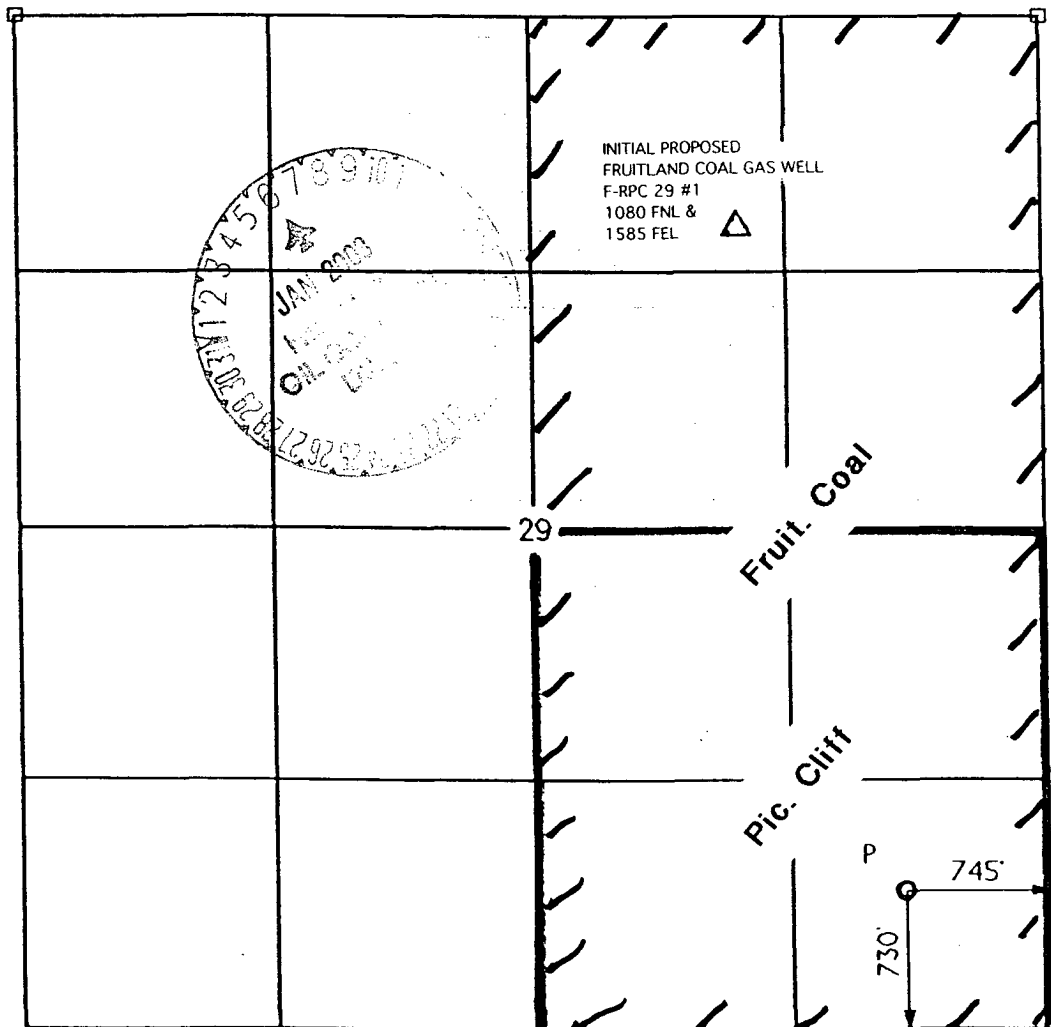
APA Number 30-045-3/281	Pool Code 71629 & 79680	Pool Name BASIN FRUIT. COAL & WEST KUTZ PC
Property Code 31057	Property Name FRPC 29	Well Number 4
OGPD No. 079219	Operator Name RICHARDSON OPERATING COMPANY	Elevation 5830'

Surface Location									
UL or Lot	Sec.	Twp.	Rge.	Lot Ldn	Feet from	North/South	Feet from	East/West	County
P	29	29 N.	13 W.		730'	SOUTH	745'	EAST	SAN JUAN

Bottom Hole Location If Different From Surface									
UL or Lot	Sec.	Twp.	Rge.	Lot Ldn	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 <i>B. Wood</i>	
Printed Name	BRIAN WOOD
Title	CONSULTANT
Date	DEC. 7, 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 31 NOVEMBER 2002	
Signature and Seal of Professional Surveyor 	

Richardson Operating Co.
F-RPC 29 #4
730' FSL & 745' FEL
Sec. 29, T. 29 N., R. 13 W.
San Juan County, New Mexico

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Drilling Program

1. ESTIMATED FORMATION TOPS

<u>Formation Name</u>	<u>GL Depth</u>	<u>KB Depth</u>	<u>Elevation</u>
Ojo Alamo Ss	000'	5'	+5,830'
Kirtland Shale	150'	155'	+5,680'
Fruitland Fm	1,330'	1,335'	+4,500'
Pictured Cliffs Ss	1,530'	1,535'	+4,300'
Total Depth (TD)*	1,600'	1,605'	+4,205'

* all elevations reflect the ungraded ground level of 5,830'

2. NOTABLE ZONES

<u>Gas Zones</u>	<u>Water Zones</u>	<u>Coal Zones</u>
Fruitland	Ojo Alamo	Fruitland
Pictured Cliffs	Fruitland	

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.

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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 ≈ 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	1,600'

Surface casing will be cemented to surface with ≈ 36 cu. ft. (≈ 30 sacks) Class B + 2% CaCl_2 . 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-five barrels of fresh water will next be circulated. Lead with ≈ 200 cubic feet (≈ 97 sacks) of Class B with 2% metasilicate (yield = 2.06 cubic feet per sack, slurry weight = 12.5 pounds per gallon). Tail with ≈ 130 cubic feet (≈ 111 sacks) of Class B with 2% CaCl_2 (yield = 1.18 cubic feet per sack, slurry weight = 15.6 pounds per gallon). Total cement volume is ≈ 330 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. Eight centralizers will be spaced on every other joint starting above the shoe. Eight turbolizers will be placed on every other joint starting from the top of the well.