

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK **DRILL** ☒ **DEEPEN** ☐

b. TYPE OF WELL

OIL ☐  
WELL

GAS ☒  
WELL

OTHER Coal Bed Methane

SINGLE ☐  
ZONE

MULTIPLE ☐  
ZONE

2. NAME OF OPERATOR **303/830-8000**  
**Richardson Operating Company** **19219** **23338** **1700 Lincoln, Suite 1700**  
**Denver, CO 80203**

3. ADDRESS AND TELEPHONE NO. **303/452-8888**  
**PERMITCO INC.** **13585 Jackson Drive**  
**Denver, CO 80241**

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

At Surface  
**885' FSL and 906' FWL**

At proposed prod. zone  
**SW SW Section 21, T30N - R14W**

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

**Approximately 5.2 miles northeast of Kirtland, New Mexico**

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

**885'**

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

**None**

16. NO. OF ACRES IN LEASE

**800 Acres**

17. NO. OF ACRES ASSIGNED  
TO THIS WELL

**160/320 acres**

19. PROPOSED DEPTH

**1,350'**

20. ROTARY OR CABLE TOOLS

**Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**5,565'** **This action is subject to technical and**  
**procedural review pursuant to 43 CFR 3105.3**  
**and appeal pursuant to 43 CFR 3105.4.**

22. APPROX. DATE WORK WILL START\*

**May 25, 1998**

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"	20#	130'	35 sx - circulate to surface
6-1/4"	4-1/2"	10.5#	1,350'	150 sx - circulate to surface

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

Richardson Operating Company proposes to drill a well to 1,350' to test the Pictured Cliffs and Fruitland Coal Formations. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and State of New Mexico requirements.

See Onshore Order No. 1 attached.

**CONFIDENTIAL - TIGHT HOLE**

Please be advised that Richardson Operating Company is considered to be the Operator of the above mentioned well. Richardson Operating Company agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the lease lands.

Bond coverage for this well is provided by Richardson Operating Company under their Statewide Bond No. NM-1711. The principal is Richardson Operating Company via surety consent as provided for in 43 CFR 3104.2.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, 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. **Lisa L. Smith**  
SIGNED **Lisa L. Smith** AUTHORIZED AGENT FOR:  
TITLE **Richardson Operating Company** DATE **5/7/98**  
(This space for Federal or State office use)

PERMIT NO.

APPROVAL DATE

**MAY 15 1998**

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/ Deane W. Spencer**

TITLE

**Team Lead**

DATE

**MAY 15 1998**

\*See Instructions On Reverse Side

Title 18 U.S.C. Section 1001, makes 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**

District I  
PO Box 1980, Hobbs, NM 88241-1980  
District II  
PO Drawer DD, Artesia, NM 88211-0719  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION  
PO Box 2088  
Santa Fe, NM 87504-2088

Form C-102  
Revised February 21, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

5310011 PM 12:18

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-045-29597	2 Pool Code 78160/71629	3 Pool Name HARPER HILL Pictured Cliffs Fruitland Coals
4 Property Code 23338	5 Property Name WF Federal 21	6 Well Number 21-1
7 OGRID No. 19219	8 Operator Name Richardson Operating Co.	9 Elevation 5565'

10 Surface Location

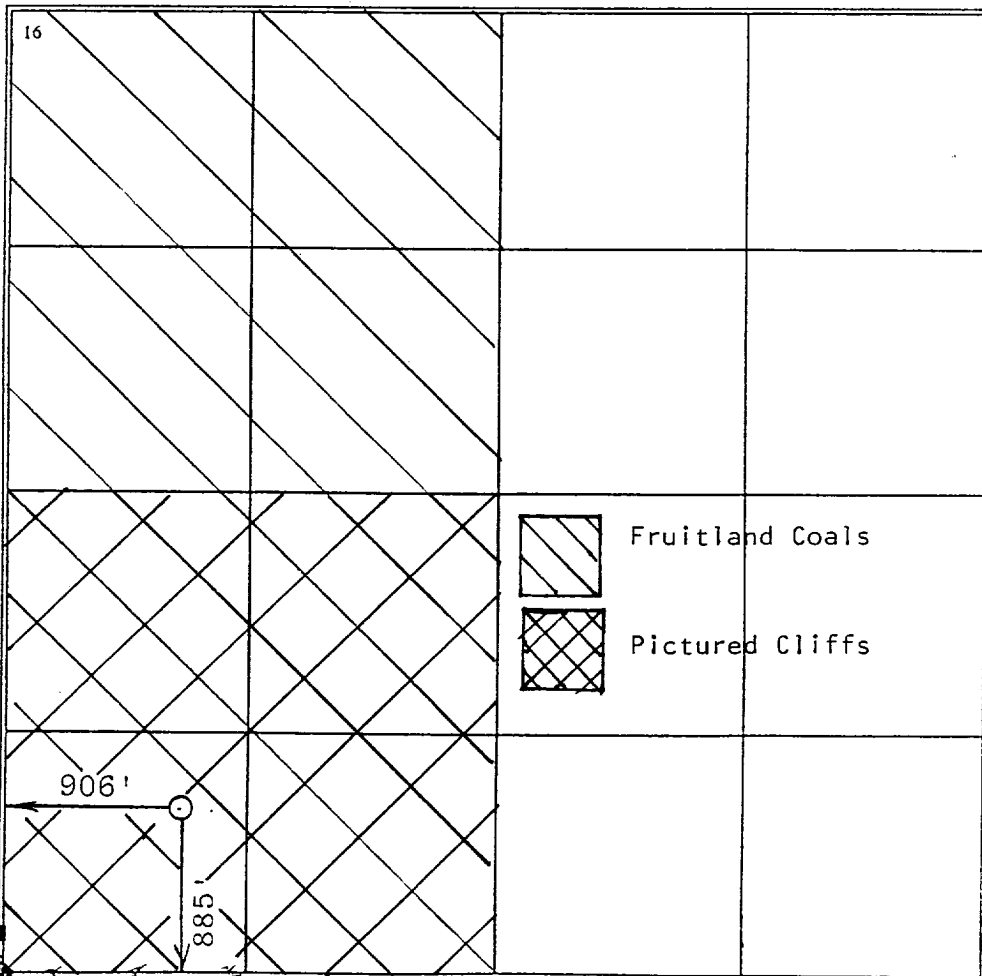
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
M	21	30 N.	14 W.		885	South	906	West	San Juan

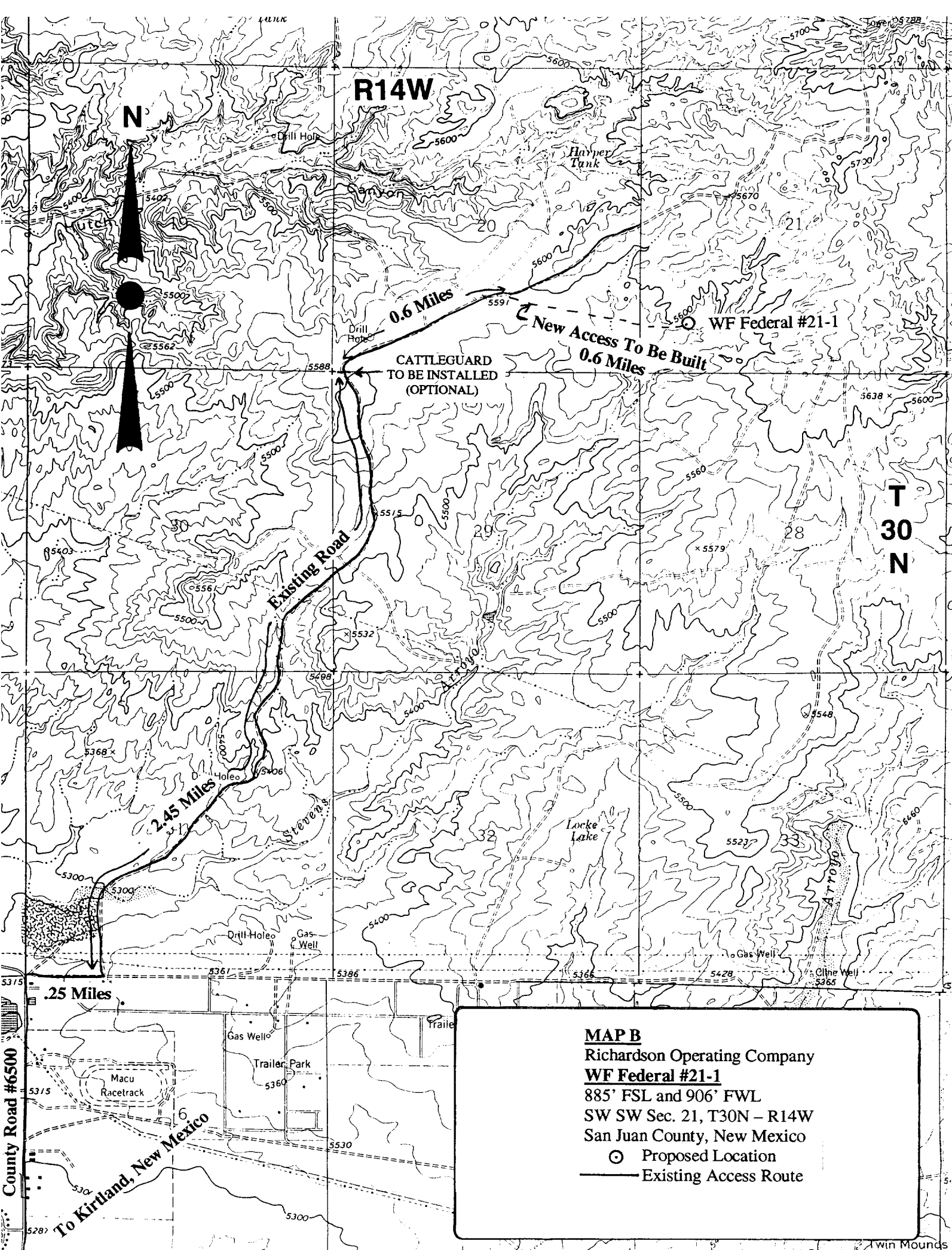
11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres 160/320	13 Joint or Infill	14 Consolidation Code	15 Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

<div>16</div> 	<div>17 OPERATOR CERTIFICATION</div> <p>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief</p> <p><i>Lisa L. Smith</i> Signature Lisa L. Smith Printed Name Authorized Agent for: Richardson Operating Company Title Date 5/7/98</p>
	<div>18 SURVEYOR CERTIFICATION</div> <p>I hereby certify that the well location shown 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</p> <p><i>Gerald G. Hubbard</i> Signature and Seal of Professional Surveyor Date of Survey 6844 Certificate Number</p>



**MAP B**

Richardson Operating Company

**WF Federal #21-1**

885' FSL and 906' FWL

SW SW Sec. 21, T30N - R14W

San Juan County, New Mexico

○ Proposed Location

— Existing Access Route