

**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** **1700 Lincoln, Suite 1700**  
**Richardson Operating Company** **Denver, CO 80203**

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

5. LEASE DESIGNATION AND SERIAL NO.  
**NM-19163**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME  
**N/A**

7. UNIT AGREEMENT NAME  
**N/A**

8. FARM OR LEASE NAME, WELL NO.  
**WF Federal 420 #1**  
**23606**

9. API WELL NO.  
**30-045-29649**  
**# 30-039-28932**

10. FIELD AND POOL, OR WILDCAT  
**Wildcat**  
**WILDCAT PRT COAL**  
**WILDCAT PRT COAL**

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA  
**Section 20, T30N - R14W**

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)\*  
At Surface **915' FSL and 1600' FWL**

At proposed prod. zone **SE SW Section 20, T30N - R14W**

**RECEIVED**  
AUG 12 1998

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE\*  
**Approximately 4.3 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) **915'**

18. DISTANCE FROM PROPOSED LOCATION\* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. **None**

12. COUNTY OR PARISH **San Juan**

13. STATE **New Mexico**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**5,587'** **This action is subject to technical and procedural review pursuant to 43 CFR 3165.2 and appeal pursuant to 43 CFR 3165.4.**

16. NO. OF ACRES IN LEASE **1,840 Acres**

17. NO. OF ACRES ASSIGNED TO THIS WELL **160/520 acres**

19. PROPOSED DEPTH **1,250'**

20. ROTARY OR CABLE TOOLS **Rotary**

22. APPROX. DATE WORK WILL START\* **May 25, 1998**

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#	1,250'	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 1,250' to test the Pictured Cliffs and Pictured 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** **Authorized Agent for:**  
SIGNED *[Signature]* TITLE **Richardson Operating Company** DATE **5/7/98**

PERMIT NO. \_\_\_\_\_ APPROVAL DATE **MAY 20 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/ Duane W. Spencer** TITLE \_\_\_\_\_ DATE **MAY 20 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

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

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

501211 012:20  AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-039-25932		2 Pool Code 96834/1029		3 Pool Name WC ZONATION; Pictured Cliffs/Fruitland Coal	
4 Property Code 23606		5 Property Name WF Federal 20			6 Well Number 20
7 OGRID No. 19219		8 Operator Name Richardson Operating Co.			9 Elevation 5587'

10 Surface Location

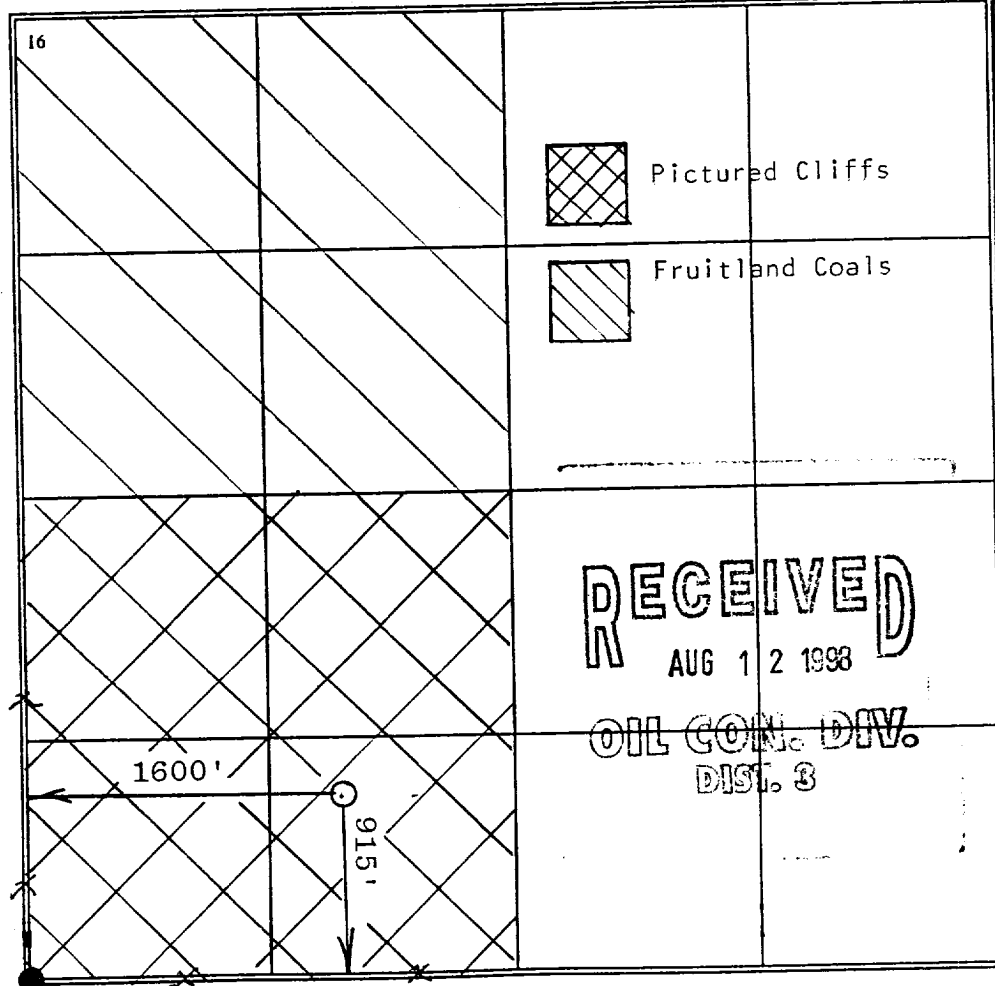
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	20	30 N	14 W		915	South	1600	West	San Juan

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 w/320 160	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

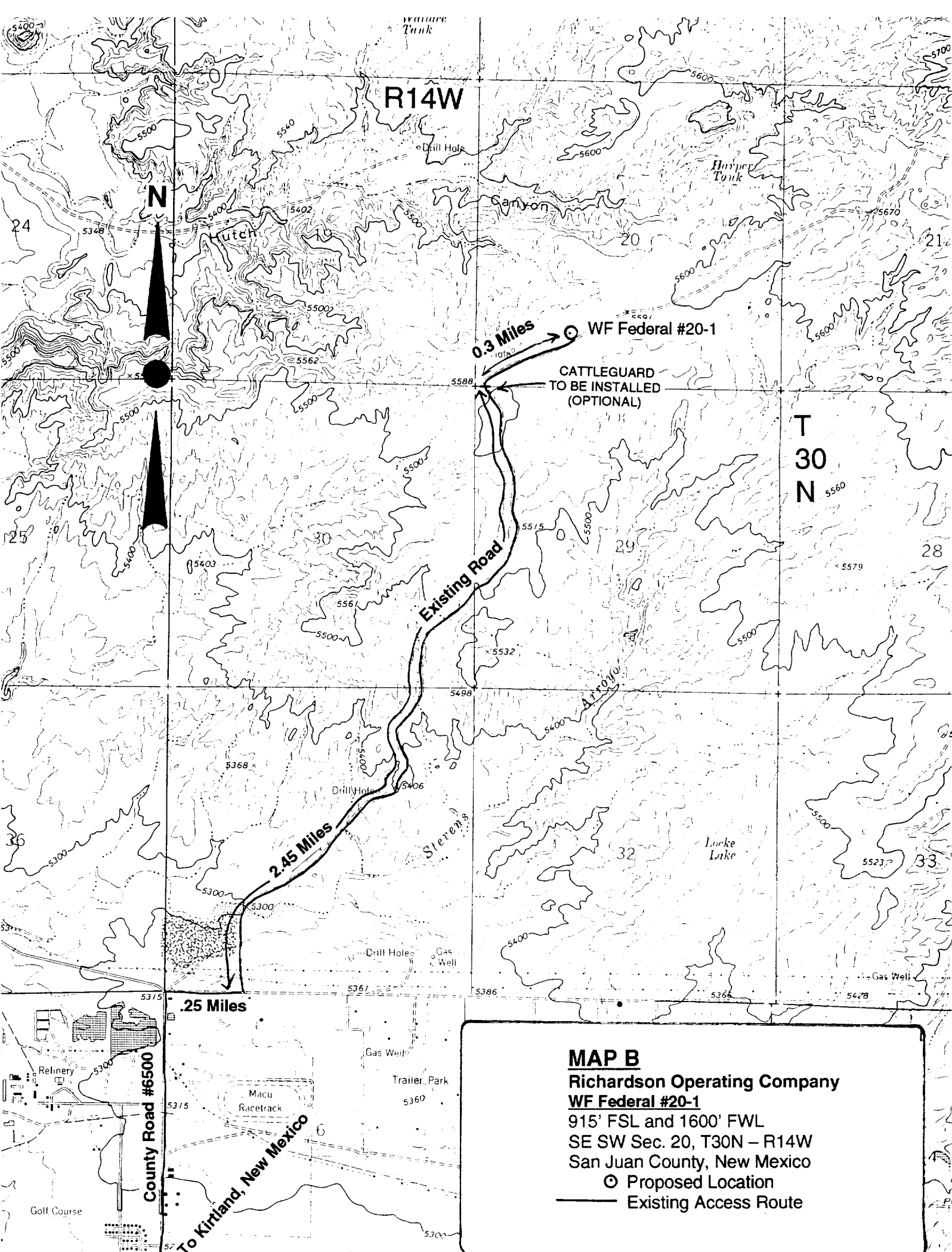


17 OPERATOR CERTIFICATION  
 I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

*Lisa L. Smith*  
 Signature  
 Lisa L. Smith  
 Printed Name  
 Authorized Agent for:  
 Title  
 Richardson Operating Company  
 Date  
 May 7, 1998

18 SURVEYOR CERTIFICATION  
 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.

Date of Survey  
 Signature and Seal of Professional Surveyor  
 GERALD S. HUDDLESTON  
 NEW MEXICO  
 6844  
 REGISTERED LAND SURVEYOR  
 Certificate Number  
 6844



R14W

N

T 30 N

0.3 Miles

WF Federal #20-1

CATTLEGUARD TO BE INSTALLED (OPTIONAL)

Existing Road

2.45 Miles

.25 Miles

County Road #6500

To Kirtland, New Mexico

**MAP B**  
**Richardson Operating Company**  
**WF Federal #20-1**  
 915' FSL and 1600' FWL  
 SE SW Sec. 20, T30N – R14W  
 San Juan County, New Mexico  
 ○ Proposed Location  
 — Existing Access Route