

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill, or to deepen or reentry to a different reservoir.

Use "APPLICATION FOR PERMIT--" for such proposals

**SUBMIT IN TRIPLICATE**

1. Type of Well

Oil Well     Gas Well     Other


2. Name of Operator

Richardson Operating Company

3. Address and Telephone No.

1700 Lincoln, Suite 1700, Denver, Colorado 80203 (303) 830-8000

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

1100' FSL, 1800' FEL      
Sec. 21-T30N-R14W

5. Lease Designation and Serial No.

NM-25857

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

WF Federal 21-3

9. API Well No.

30-045-30261

10. Field and Pool, or Exploratory Area

Harper Hill Fruitland Sand PC

11. County or Parish, State

San Juan County, NM

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION
<input type="checkbox"/> Notice of Intent	<input type="checkbox"/> Abandonment
<input checked="" type="checkbox"/> Subsequent Report	<input type="checkbox"/> Recompletion
<input type="checkbox"/> Final Abandonment Notice	<input type="checkbox"/> Plugging Back
	<input type="checkbox"/> Casing Repair
	<input type="checkbox"/> Altering Casing
	<input type="checkbox"/> Surface Casing/Cementing
	<input checked="" type="checkbox"/> Other: see below
	<input type="checkbox"/> Change of Plans
	<input type="checkbox"/> New Construction
	<input type="checkbox"/> Non-Routine Fracturing
	<input type="checkbox"/> Water Shut-Off
	<input type="checkbox"/> Conversion to Injection
	<input type="checkbox"/> Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form).

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work.

If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markets and zones pertinent to this work.)\*

Well completed as per attached treatment report

2001 OCT 10 PM 2:55  
070 FARMINGTON, NM

14. I hereby certify that the foregoing is true and correct

Signed: *Cathleen Colley*

Title: Land Manager

(This space for Federal or State office use)

Approved by: \_\_\_\_\_

Title: \_\_\_\_\_

Conditions of approval, if any:

ACCEPTED FOR RECORD  
Date: 10/4/00

JAN 29 2001

FARMINGTON FIELD OFFICE

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.

# RICHARDSON OPERATING COMPANY

## FRACTURE TREATMENT REPORT

Operator: Richardson Operating Company Well Name: WF Federal 21-3  
Date: August 27, 2000  
Field: Pictured Cliffs Location: 21-30N-14W County: San Juan State: NM  
Stimulation Company: Schlumberger Supervisor: \_\_\_\_\_

Stage #: 1/1

Sand on location (design): 73,100 Weight ticket: 73,100 Size/type: 20/40 Arizona Sand

Fluid on location: No. of Tanks: 2 Strap: 40 Amount: 800 Usable: 760

### Perforations

Depth: 1191' - 1203' Total Holes: 48 PBTD: 1420'  
Shots per foot: 4 EHD: 0.41

### Breakdown

Acid: 500  
Balls: N/A  
Pressure: 417 Rate: 3

### Stimulation

ATP: 409 AIR: 22.3 bpm  
MTP: 1822 MIR: 31.6 bpm

	Sand Stage	Pressure	Breaker test
ISIP: <u>430</u>	pad	554	
5 min: <u>380</u>	1 ppg	531	20 cps break in
10 min: <u>325</u>	2 ppg	490	43 mins.
15 min: <u>307</u>	3 ppg	494	
	4 ppg	522	

Job Complete at: 9:00 hrs. Date: 8/27/00 Start flow back: N/A

Total Fluid Pumped: 725

Total Sand Pumped: 73,100 Total Sand on Formation: 72,800

Total Nitrogen Pumped: N/A

Notes: