

**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)**

1086' FNL, 866' FEL

A

Sec. 20-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 20-2

**9. API Well No.**

30-045-30062

**10. Field and Pool, or Exploratory Area**

Basin Fruitland Coal/Twin Mounds PC Ext.

**11. County or Parish, State**

San Juan County, NM

**12. CHECK APPROPRIATE BOX(es) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA****TYPE OF SUBMISSION**☐

Notice of Intent

☒

Subsequent Report

☐

Final Abandonment Notice

**TYPE OF ACTION**☐

Abandonment

☐

Recompletion

☐

Plugging Back

☐

Casing Repair

☐

Altering Casing

☐

Surface Casing/Cementing

☒

Other: see below

☐

Change of Plans

☐

New Construction

☐

Non-Routine Fracturing

☐

Water Shut-Off

☐

Conversion to Injection

☐

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 reports

**14. I hereby certify that the foregoing is true and correct.**Signed: Cathleen Gilly

Title: Land Manager

(This space for Federal or State office use)

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

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

Conditions of approval, if any: \_\_\_\_\_

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

statements or representations as to any matter within its jurisdiction.

**ACCEPTED FOR RECORD**

Date: JAN 29 2001

**FARMINGTON**  
BY: [Signature]  
Date: [Signature]

# RICHARDSON OPERATING COMPANY

## FRACTURE TREATMENT REPORT

Operator: Richardson Operating Company Well Name: WF Federal 20-2  
Date: September 15, 2000  
Field: Fruitland Coal Location: 20-30N-14W County: San Juan State: NM  
Stimulation Company: Schlumberger Supervisor: \_\_\_\_\_

Stage #: 2/2

Sand on location (design): 57,000 Weight ticket: 57,000 Size/type: 20/40 Brady Sand

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

### Perforations

Depth: 1072' - 1085' Total Holes: 52 PBTD: 1281.41'  
Shots per foot: 4 EHD: 0.41

### Breakdown

Acid: 500  
Balls: N/A  
Pressure: 2200 Rate: 3 bpm

### Stimulation

ATP: 2700 AIR: 36  
MTP: 3800 MIR: 36

	Sand Stage	Pressure	Breaker test
ISIP: <u>3800</u>	pad	1700	
5 min: <u>600</u>	1 ppg	2000	17 cps break
10 min: <u>440</u>	2 ppg	2100	in 30 mins.
15 min: <u>400</u>	3 ppg	3800	
	4 ppg		

Job Complete at: 15:30 hrs. Date: 9/15/00 Start flow back: N/A  
Total Fluid Pumped: 378  
Total Sand Pumped: 14,000 Total Sand on Formation: 13,800  
Total Nitrogen Pumped: N/A

Notes:

# RICHARDSON OPERATING COMPANY

## FRACTURE TREATMENT REPORT

Operator: Richardson Operating Company Well Name: WF Federal 20-2  
 Date: September 1, 2000  
 Field: Pictured Cliffs Location: 20-30N-14W County: San Juan State: NM  
 Stimulation Company: Schlumberger Supervisor: \_\_\_\_\_

Stage #: 1/2

Sand on location (design): 57,200 Weight ticket: 57,200 Size/type: 20/40 Brady Sand

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

### Perforations

Depth: 1090' - 1100' Total Holes: 40 PBTD: 1281.41'

Shots per foot: 4 EHD: 0.41

### Breakdown

Acid: 500

Balls: N/A

Pressure: 2200 Rate: 3 bpm

### Stimulation

ATP: 675 AIR: 36.5

MTP: 700 MIR: 37

	Sand Stage	Pressure	Breaker test
	pad	700	
ISIP: <u>470</u>	1 ppg	700	
5 min: <u>240</u>	2 ppg	650	
10 min: <u>190</u>	3 ppg	650	
15 min: <u>175</u>	4 ppg	650	
			17 cps break in 43 mins.

Job Complete at: 12:09 hrs. Date: 9/1/00 Start flow back: N/A

Total Fluid Pumped: 556

Total Sand Pumped: 57,200 Total Sand on Formation: 56,300

Total Nitrogen Pumped: N/A

Notes: