

REVISED

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)

1055' FSL, 1470' FWL

Sec. 34-T30N-R14W

5. Lease Designation and Serial No.

NMNM-0206995

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

8. Well Name and No.

WF Federal 34-2

9. API Well No.

30-045-29882

10. Field and Pool, or Exploratory Area

Harper Hill FR Sand PC/Basin Fruitland Coal

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	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 reports



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

Signed: Cathleen Colby

Title: Land Manager

Date: APR 26 2000

(This space for Federal or State office use)

Approved by:

Title:

Date: APR 26 2000

Conditions of approval, if any:

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 statement or representation as to any matter within its jurisdiction.

RICHARDSON OPERATING COMPANY

FRACTURE TREATMENT REPORT

Operator: Richardson Operating Company Well Name: WF Federal 34-2
 Date: 12/8/99
 Field: Basin Fruitland Coal Location: 34-30N -14W County: San Juan State: NM
 Stimulation Company: Schlumberger Dowell Supervisor: _____

Stage #: 2/2

Sand on location (design): 50,200 Weight ticket: 50,179 Size/type: 20/40 Arizona

Fluid on location: No. of Tanks: 5 Strap: 5 Amount: 1250 bbls Usable: 1150 bbls

Perforations

Depth: 1034' - 1052' Total Holes: 72 PBDT: 1248'
 Shots per foot: 4 EHD: 0.38

Breakdown

Acid: 400 gals
 Balls: _____
 Pressure: 370 Rate: 3.5

Stimulation

ATP: 560# AIR: 21.0 bpm
 MTP: 3708# MIR: 31.4 bpm

	Sand Stage	Pressure	Breaker test
	pad	925#	16 cps in 20 min
ISIP: <u>375#</u>	1 ppg	883#	break in 48 min
5 min: <u>330#</u>	2 ppg	838#	
10 min: <u>307#</u>	3 ppg	705#	
15 min: <u>288#</u>	4 ppg	677#	

Job Complete at: 9:48 hrs.

Date: 12/8/99

Start flow back: 12/8/99

Total Fluid Pumped: 743 bbls 31,211 gals

Total Sand Pumped: 50,179

Total Sand on Formation: 50,179

Total Nitrogen Pumped: _____

Notes:

spot acid down tbg toh w/ tbg
 start frac

RICHARDSON OPERATING COMPANY

FRACTURE TREATMENT REPORT

Operator: Richardson Operating Company Well Name: WF Federal 34-2
Date: 12/8/99
Field: Harper Hill FR Sand PC Location: 34-30N-14W County: San Juan State: NM
Stimulation Company: Schlumberger Dowell Supervisor: _____

Stage #: 1/2

Sand on location (design): 52,000 Weight ticket: 52,000 Size/type: 20/40 Arizona

Fluid on location: No. of Tanks: 5 Strap: 18' 6" Amount: 1850 bbls Usable: 1750 bbls

Perforations

Depth: 1062' - 1072' Total Holes: 40 PBTD: 1248'

Shots per foot: 4 EHD: 0.38

Breakdown

Acid: 0

Balls: N/A

Pressure: _____ Rate: _____

Stimulation

ATP: 559# AIR: 22.8 bpm

MTP: 751# MIR: 30.7 bpm

	Sand Stage	Pressure	Breaker test
ISIP: <u>343#</u>	pad	641#	20 cps
5 min: <u>311#</u>	1 ppg	632#	break in 1 hr
10 min: <u>279#</u>	2 ppg	659#	
15 min: <u>247#</u>	3 ppg	645#	
	4 ppg	609#	

Job Complete at: 9:48 hrs. Date: 12/8/99 Start flow back: 12/8/99

Total Fluid Pumped: 544 bbls 22,885 gals

Total Sand Pumped: 52,000 Total Sand on Formation: 52,000

Total Nitrogen Pumped: N/A

Notes: