

**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, Allotee 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

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

(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: 1-20-00

(This space for Federal or State office use)

Approved by: _____

Title: _____

Date: _____

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 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 34-2
Date: 12/8/99
Field: Twin Mounds 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 PBDT: 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
	pad	641#	20 cps
ISIP: <u>343#</u>	1 ppg	632#	break in 1 hr
5 min: <u>311#</u>	2 ppg	659#	
10 min: <u>279#</u>	3 ppg	645#	
15 min: <u>247#</u>	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:

DEPARTMENT OF THE INTERIOR

(See other instructions on reverse side.)

Expires: February 28, 1995

BUREAU OF LAND MANAGEMENT

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.

NMNM-0206995

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

WF Federal 34-2

9. API WELL NO.

30-045-29882

10. FIELD AND POOL, OR WILDCAT

Twin Mounds PC

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA

Sec. 34-T30N-R14W

1. TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

2. TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other _____

3. NAME OF OPERATOR
Richardson Operating Company

4. ADDRESS AND TELEPHONE NO.
1700 Lincoln, Suite 1700, Denver, CO 80203 303-830-8000

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

At surface 1055' FSL, 1470' FWL

At top prod. interval reported below same

At total depth same

14. PERMIT NO. _____ DATE ISSUED _____

12. COUNTY OR PARISH San Juan 13. STATE NM

15. DATE SPUNDED 8/30/99 16. DATE T.D. REACHED 9/1/99 17. DATE COMPL. (Ready to prod.) _____ 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 5513' GL 19. ELEV. CASINGHEAD 5513'

20. TOTAL DEPTH, MD & TVD 1295' 21. PLUG, BACK T.D., MD & TVD _____ 22. IF MULTIPLE COMPL. HOW MANY? 2 23. INTERVALS DRILLED BY _____ ROTARY TOOLS X CABLE TOOLS _____

24. PRODUCING INTERVAL(S) OF THIS COMPLETION -TOP, BOTTOM, NAME (MD AND TVD)* 1062' - 1072' Pictured Cliffs 25. WAS DIRECTIONAL SURVEY MADE YES

26. TYPE ELECTRIC AND OTHER LOGS RUN Compensated Neutron Log 27. WAS WELL CORED NO

28. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
7"	20#	140'	8 - 3/4"	50 sx (59 cu.ft.)	surface
4 - 1/2"	10.5#	1295'	6 - 1/4"	65 sx (134 cu.ft.)	surface

29. LINER RECORD 30. TUBING RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 - 3/8"		1057'

31. PERFORATION RECORD (Interval, size and number) 1062' - 1072' 40 holes .38" 4 spf

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
1062' - 1072'	52,000 20/40 Arizona Linear Gel

33. PRODUCTION

DATE FIRST PRODUCTION _____ PRODUCTION METHOD (Flowing, gas lift, pumping--size and type of pump) _____ WELL STATUS (Producing or shut-in) _____

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD. FOR TEST PERIOD	OIL-BBL.	GAS-MCF.	WATER-BBL.	GAS-OIL RATIO

FLOW, TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE	OIL-BBL.	GAS-MCF.	WATER-BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.) _____ TEST WITNESSED BY _____

35. LIST OF ATTACHMENTS _____

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED Cathleen Colby TITLE Land Manager DATE January 29, 2000

*(See Instructions and Spaces for Additional Data 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.

37. SUMMARY OF POROUS ZONES: (Show all important zones of porosity and contents thereof; cored intervals; and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

38.

GEOLOGIC MARKERS

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	GEOLOGIC MARKERS		
				NAME	MEAS. DEPTH	TRUE VERT. DEPTH
Fruitland	1034'	1052'				
Pictured Cliffs	1062'	1072'				



RICHARDSON OPERATING COMPANY

1700 Lincoln, Suite 1700
Denver, Colorado 80203 (303) 830-8000
FAX (303) 830-8009

WF FEDERAL 34-1

WORKING INTEREST: RICHARDSON PRODUCTION CO. 100%
1700 LINCOLN SUITE 1700
DENVER, CO 80203
303-830-8000

In Lieu of Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

RECEIVED

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

09 SEP 10 1:00 PM 070 FARMINGTON, NM

Form fields 1-11: 1. Type of Well (Gas Well checked), 2. Name of Operator (Richardson Operating Company), 3. Address and Telephone No., 4. Location of Well, 5. Lease Designation and Serial No. (NNF:206995), 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 PC/Bestn Frt. Coal), 11. County or Parish, State (San Juan, NM)

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

Form fields for TYPE OF SUBMISSION and TYPE OF ACTION. Includes checkboxes for Abandonment, Recompletion, Plugging Back, Casing Repair, Altering Casing, Other, Change of Plans, New Construction, Non-Routine Fracturing, Water Shut-Off, Conversion to Injection, Dispose Water.

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 markers and zones pertinent to this work.)

8/30/99 - Spud 8-3/4" hole @ 0930 hrs. TD surface hole 140'. Run 3 jts. of 7", 20#, ST&C casing (130.80') & land @ 136' KB. Cement w/ 50 sx (59 cu.ft.) of Class "B" cement w/ 2% CaCl2. PD @ 1545 hrs. 8/30/99. Circulated 5 bbls of cement to surface.

9/1/99 - TD 4-1/2" hole @ 1500 hrs. @ 1295'. Run 30 jts. of 4-1/2", 10.5#, ST&C white band casing (1287.58') & land @ 1293' KB. Cement w/ 65 sx (134 cu.ft.) of Class "B" cement w/ 2% Sodium Metasilicate & tail in w/ 75 sx (88.5 cu.ft.) of Class "B". PD @ 19:00 hrs. 9/1/99. Circulated 10 bbls of cement to surface.

14. I hereby certify that the foregoing is true and correct. Signed (John C. Thompson) Title Agent/Engineer Date 09/09/99

(This space for Federal or State office use)

Approved by _____ Title _____ Date _____ 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 any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

ACCEPTED FOR RECORD

SEP 14 1999

FARMINGTON FIELD OFFICE BY [Signature]

OPERATOR

UNITED STATES

SUBMIT IN DUPLICATE

FORM APPROVED
OMB NO. 1004-0137

DEPARTMENT OF THE INTERIOR

(See other instructions on reverse side)

Expires: February 28, 1995

BUREAU OF LAND MANAGEMENT

1. LEASE DESIGNATION AND SERIAL NO.

NMNM-0206995

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

WF Federal 34-2

9. API WELL NO.

30-045-29882

10. FIELD AND POOL, OR WILDCAT

Basin FC

11. SEC. T., R., M. OR BLOCK AND SURVEY OR AREA

Sec. 34-T30N-R14W

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

TYPE OF WELL: OIL WELL GAS WELL DRY Other _____

TYPE OF COMPLETION: NEW WELL WORK OVER DEEP-EN PLUG BACK DIFF. RESVR. Other _____

NAME OF OPERATOR
Richardson Operating Company

ADDRESS AND TELEPHONE NO.
1700 Lincoln, Suite 1700, Denver, CO 80203 303-830-8000

LOCATION OF WELL (Report location clearly and in accordance with any State requirements)*
At surface: 1055' FSL, 1470' FWL

At top prod. interval reported below: same

At total depth: same

14. PERMIT NO. _____ DATE ISSUED _____
12. COUNTY OR PARISH: San Juan 13. STATE: NM

15. DATE SPUDDED: 8/30/99 16. DATE T.D. REACHED: 9/1/99 17. DATE COMPL. (Ready to prod.): 12-14-99 18. ELEVATIONS (OF, RKB, BT, GR, ETC.): 5513' GL 19. ELEV. CASINGHEAD: 5513'

20. TOTAL DEPTH, MD & TVD: 1295' 21. PLUG, BACK T.D., MD & TVD: _____ 22. IF MULTIPLE COMPL. HOW MANY?: 2 23. INTERVALS DRILLED BY: _____ 24. ROTARY TOOLS: X 25. CABLE TOOLS: _____

26. PRODUCING INTERVAL(S) OF THIS COMPLETION -TOP, BOTTOM, NAME (MD AND TVD)*: 1034' - 1052' Fruitland Coal 27. WAS DIRECTIONAL SURVEY MADE: YES

28. TYPE ELECTRIC AND OTHER LOGS RUN: Compensated Neutron Log 29. WAS WELL CORED: NO

5. CASING RECORD (Report all strings set in well)

CASING SIZE/GRADE	WEIGHT, LB/FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
7"	20#	140'	8 - 3/4"	50 sx (59 cu.ft.)	surface
4 - 1/2"	10.5#	1295'	6' 1/4"	65 sx (134 cu.ft.)	surface

6. LINER RECORD					30. TUBING RECORD		
SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
					2 - 3/8"		1057"

31. PERFORATION RECORD (Interval, size and number)	32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.	
	DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
1034' - 1052' 72 holes .38" 4 spf	1034' - 1052'	50.179 20/40 Arizona Linear Gel

33. PRODUCTION
DATE FIRST PRODUCTION _____ PRODUCTION METHOD (Flowing, gas lift, pumping—rate and type of pump) _____ WELL STATUS (Producing or shut-in) _____

34. DATE OF TEST: 12/14/99 HOURS TESTED: 48 CHOKE SIZE: 1/2" PROD. FOR TEST PERIOD: _____ OIL-BBL.: _____ GAS-MCF.: 110 WATER-BBL.: 360 GAS-OIL RATIO: _____

35. FLOW TUBING PRESS.: 20 CASING PRESSURE: 80 CALCULATED 24-HOUR RATE: _____ OIL-BBL.: _____ GAS-MCF.: 55 WATER-BBL.: 180 OIL GRAVITY-API (CORR.): _____

36. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.): vented TEST WITNESSED BY _____

37. LIST OF ATTACHMENTS _____

38. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED: Colleen Colby TITLE: Land Manager DATE: January 20, 2000

*(See Instructions and Spaces for Additional Data 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.