

(June, 1990)

**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)

1690' FSL & 660' FEL Section 14-T29N-R14W NMPM

5. Lease Designation and Serial No.

14-20-603-2198

6. If Indian, Allottee or Tribe Name

Navajo

7. If Unit or CA, Agreement Designation**8. Well Name and No.**

WF Navajo 14 #1

9. API Well No.

30-045-30485

10. Field and Pool, or Exploratory Area

West Kuntz PC

11. County or Parish, State

San Juan Co, 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 per attached treatment report.

**14. I hereby certify that the foregoing is true and correct**Signed: [Signature]Title: Operations ManagerDate: 6/01/01

(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.

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SMC OFFICE

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RICHARDSON OPERATING COMPANY

FRACTURE TREATMENT REPORT

Operator: Richardson Operating Company Well Name: WF Navajo 14 #1
Date: _____
Field: West Kutz PC Location: 14-29N-14W County: San Juan State: NM
Stimulation Company: American Energy Services Supervisor: John Durham

Stage #:

Sand on location (design): 44,000 Weight ticket: 44,000 Size/type: 2040 Brady

Fluid on location: No. of Tanks: _____ Strap: _____ Amount: _____ Usable: _____

Perforations

Depth: 834' - 842' Total Holes: 32 PBTD: 970'
Shots per foot: _____ EHD: 0.42

Breakdown

Acid: 500
Balls: NA
Pressure: 850 Rate: _____

Stimulation

ATP: 830 AIR: 35 bpm
MTP: 13000 MIR: 35 bpm

	Sand Stage	Pressure	Breaker test
ISIP: _____	pad		
5 min: _____	1 ppg		
10 min: _____	2 ppg		
15 min: _____	3 ppg		
	4 ppg		

Job Complete at: _____ hrs. Date: 4/13/01 Start flow back: _____

Total Fluid Pumped: 44,000

Total Sand Pumped: 44,000

Total Sand on Formation: _____

Total Nitrogen Pumped: _____

Notes:



AMERICAN ENERGY SERVICES

Treatment Report

AHN Beaky

PC FRAC

Date 4-13-01 District Farmington Job No. 70012544 Customer Richardson
 Well Name WLF Navajo 14-1 Lease _____ Field _____ Location _____
 County San Juan State NM Stage number 1

WELL DATA

Formation PC TD 970 PB _____
 Casing Size 4 1/2 Wt. 10.5 Set From/To A to 970
 Liner Size _____ Wt. _____ Set From/To _____
 Tubing Size _____ Wt. _____ Set at _____
 Packer Type _____ Set at _____
 No. of Perfs 32 Perf Size .42 Interval 834 to 842

Other Well Data

TREATMENT DATA

Job Type (Frac/Acid/Other) Amber 1025 Foam (Yes) 0
 Pad Type Amber 1025 Pad Volume 107
 Base Fluid Type Amber 1025 Base Fluid Vol. _____
 Foam Quality _____ % Mitchell or CIP _____
 Prop Types Beaky / Super FELC Prop Mesh 20/40 Prop Quantity 36,000 / 8000
 Treat Via 4 1/2 10.5 (Tubing / Casing / Annulus / Tubing & Annulus)
 Hole Loaded With 15% HCl

Capacities and Total Liquid/Gas Pumped

Tubing Cap. _____
 Casing Cap. 15 1/2
 Annular Cap. _____
 Open Hole Cap. _____
 Fluid to load 1 bb
 Flush Vol. 1.3
 Fluid to Recover _____
 Total CO2/N2 _____

Procedure Summary

500 gal. 15% HCl, 2100 gal pad. 1st time
1200 gal pad 2nd time.

Time AM/PM	Treating Pressure (psi)		Slurry Rate BPM	Surface Slurry BBLS. Pumped		CO2 or N2 Rate BPM or SCFM	Surface CO2 or N2 Pumped		Comments
	STP	Annulus		Stage	Total		Stage	Total	
0845									
0851	4500								safety meeting
0853	1300		1						test lines
0859	830 to 5900		35	50					1900 - start HCl - Beaky
0901									start pad
0911	4500		1						shut down - 4" line, BLEW
0918	830 to 13,000		35	30					test lines - Held for 5 min
									start pad.
									Started pad on the 1st
									time @ about 45 bbls
									the psi was at 8500 lbs
									and it jumped to 5900,
									at 5900 we blew the 4"
									Free pipe. We exposed the
									iron and retested to 4500
									Started the 2nd time @
									25 bbls the psi went to
									12,000. shut well in
									moved to next loc.

Treating Pressure: Minimum 830 Maximum 13,000 Average 830

Treating Rate: Minimum 5 Maximum 35 Average 35

I.S.D.P. _____ Final Shut-in Pressure _____ in _____ Minutes _____

Operators Maximum Pressure 4000

Customer Rep. Jim Quinn

American Energy Services Rep. Tom Gault