Form 3160-5

UNITED STATES DEPARTMENT OF THE INTERIOR RURFAU OF LAND MANAGEMENT

FORM APPROVED

Budget Bureau No. 1004-0135

	Expires: March 31, 1993 5. Lease Designation and Serial No. 14-20-603-2172 6. It Indian, Allotte or Tribe Name Mavajo 7. If Unit or CA, Agreement Designation 8. Well Name and No. NW Cha Cha #74 9. API Well No. 30-045-07598 10. Field and Pool, or Exploratory Area Cha Cha Gallup 11. County or Parish, State San Juan County, NM Change of Plans New Construction Non-Routine Fracturing Water Shut-Off Conversion to Injection
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	14-20-603-2172 6. If Indian, Allotte or Tribe Name Mavajo 7. If Unit or CA, Agreement Designation 8. Well Name and No. NW Cha Cha #74 9. API Well No. 30-045-07598 10. Field and Pool, or Exploratory Area Cha Cha Gallup 11. County or Parish, State San Juan County, NM Change of Plans New Construction Non-Routine Fracturing Water Shut-Off
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Fictured Chins formation per attached procedure.	
Direction and address of the second s	
Plug back procedure: 1 MIRU ROPCO Rig #1. NU 2 3/8" relief line. Hold safety meeting. ND tubingh	ead. NU
BOP. MIRU two 400 bbl frac tanks with fresh clean city water.	
	and check
2 Unseat packer. TOOH with tubing. Lay down packer and TIH with seat nipple	, and ones.
valve on end of tubing. Land tubing @ about 5584' and shut pipe rams.	100% aveces
3 Mix and pump 43 sacks Class B cement. Should be enough for 250' plug and	100 % excess.
Flush tubing with 22 bbls H20. TOOH with tubing. SDON.	
4 Test to 1000# for 30 mins. If pressure holds, leave shut-in until pipeline right	ot-way
received. If pressure doesn't hold, find hole and squeeze.	
Recompletion procedure: See attached.	
14. I hereby certify the foregoing is true and correct.	
Signed: AHILLEN Collag Title: Land Manager	Date: July 6 2000
Signed. Carrette	Date: July 6, 2000
(This space for Federal or State office use)	Date: July 0, 2000
Approved by:	Date: 8/3/00
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 Sta	

* See Instructions on Reverse Side

statements or representations as to any matter within its jurisdiction.

NW Cha Cha #74

WORKOVER/COMPLETION PROCEDURE

Richardson Operating Company 3100 La Plata Highway Farmington, NM 87401 (505) 564-3100 Phone (505) 564-3109 Fax

Prepared by

B. Gager

Date

June 29, 2000

Well Name

NW Cha Cha #74

Location

T29N, R14W Sec 36 SWSE (Unit O)

660' FSL and 1980' FEL

County

San Juan

Field

Cha Cha Gallup
Cha Cha Gallup

Pool API#

30-045-07598

Lease No.

Navajo 14-20-603-2172

Elev GL

5956'

Elev KB

5967'

KB

11'

OBJECTIVE

Attempt recompletion in Pictured Cliffs formation

PROCEDURE

- 1. Rig up wireline truck. Tag top of cement. If plug is in place, TIH with tubing to 4410'. Set 200' balanced plug from 100' below to 100' above Mancos formation. Pull out of hole to 100' below Lewis formation @ 1808'. Set 200' plug from 100' below to 100' above Lewis Shale. SDON.
- 2. If plug is in place, perforate four 0.41" squeeze holes on 120 degree phasing at about 1580'.
- 3. Pump down 4 ½" casing and establish circulation on back side.
- 4. Release wireline truck.
- 5. Pump scavenger cement ahead with red dye and additional cement (Class B, 1% Cacl2, 1/4 #/sack celloflake, .25 #/sack Gilsonite to yield 1.66 ft3/sack, 13.6 #/gallon) 20% excess.
- 6. Flush with 12.35 bbls fresh H2O.

NW Cha Cha #74

- 7. Shut down overnight.
- 8. RU Schlumberger. Run CBL GR from PBTD to surface. Run Compensated Neutron log PBTD to surface. If cement not to surface, then 1" cement down 8 5/8" and 4 ½" annulus 50' to surface.

If cement is at surface, then perforate Pictured Cliffs formation 1504' to 1514' with 4 spf 0.41" holes 120 degrees phasing.

- 9. Install 5000# 4 ½" frac valve.
- 10. RU frac equipment and pressure test surface lines to 5000 psi.
- Fracture treat with 20# linear gel and 40,00# 20/40 sand as per service company design. Bullhead 500 gallons 7 ½" HCL ahead. Observe fracture closure after treatment.
- 12. Shut-in for 24 hrs.
- 13. TIH with 2 3/8" tubing with notched collar on end of tubing, one joint, 4' perforated sub, seat nipple and land end of tubing 30' above PBTD.
- 14. Swab well until flow rate is established or run rods and pump if needed.
- 15. Obtain water samples of gel analysis when 80% of load recovered.