Form 3160-5 (June 1990)

## **UNITED STATES** DEPARTMENT OF THE INTERIOR **BUREAU OF LAND MANAGEMENT**

FORM APPROVED Budget Bureau No. 1004-0135

	LAPITES. IN	MI CII	21, 177	,,
Lease	Designation	and	Serial	No

-5.

SF078863 SUNDRY NOTICES AND REPORTS ON WELLS 6. If Indian, Allottee or Tribe Name 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 7. If Unit or CA, Agreement Designation SUBMIT IN TRIPLICATE 1. Type of Well Oil, Well 8. Well Name and No. Gas Well Krause #5 2. Name of Operator 9. API Well No. C/O KM Production Company R & G Drilling Co. 30-045-0698200 3. Address and Telephone No. 10. Field and Pool, or Exploratory Area PO Box 2406, Farmington, NM 87499 (505)325-6900 Kutz PC West 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 11. County or Parish, State 995' FSL & 980' FWL Sec. 32, T28N, R11W San Juan County, NM CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA 12. TYPE OF ACTION TYPE OF SUBMISSION Notice of Intent Change of Plans Abandonment **New Construction** Recompletion Non-Routine Fracturing Subsequent Report Plugging Back Water Shut-Off Casing Repair Conversion to Injection Final Abandonment Notice Altering Casing Other Plugging back from PC, Dispose Water Recomplete in Fruitland Coal (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 markers and zones pertinent to this work.)\* As Per Attached Procedure. OIL CON. DIV. Petroleum Engineer 8-4-92 (This space for Federal or State office use) APPROVED Approved by 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 Unded State And Indian Management States and Company of the Unded States and Indian States and Indi representations as to any matter within its jurisdiction

## FRUITLAND COAL RE-COMPLETION PROGNOSIS R & G DRILLING CO. KRAUSE #5 SWSW SEC 32, T28N R11W SAN JUAN COUNTY, NEW MEXICO

EXISTING TUBULARS

CASING: 5-1/2" 14.0 #/FT K-55 SET @ 1924'

TUBING: NONE

EXISTING PERFORATIONS

PICTURED CLIFFS: 1844 - 1870 @ 2SPF

PROCEDURE

- 1 . MOVE IN AND RIG UP COMPLETION UNIT. SET ANCHORS.
- 2 . DIG AND FENCE RESERVE PIT. INSTALL 2" BLOWDOWN LINES.
- 3. BLOW DOWN WELL. KILL WITH FRESH WATER IF NECESSARY. NIPPLE DOWN WELLHEAD AND NIPPLE UP BOP. CHECK AND REPLACE WELLHEAD VALVES IF NECESSARY.
- 4 . RIG UP WIRELINE. RUN GAMMA RAY-CLL FROM PBTD TO 1500' FOR CORRELATION. SET CIBP AT 1840'.
- 5. PICK UP 2-7/8" 6.5 #/FT N-80 TUBING FOR WORK STRING. TAG CIBP WITH TUBING AT 1840' FOR DEPTH CORRELATION. MOVE TUBING TO 1826'.
  (BOTTOM FRUITLAND COAL PERFORATION).
- 6. RIG UP PUMP TRUCK. PRESSURE TEST CASING AND CIBP TO 1000 PSI. CIRCULATE HOLE CLEAN WITH FRESH WATER. SPOT 150 GALLONS OF 7-1/2% DI HCL ACID ACROSS THE FRUITLAND COAL INTERVAL.
- 7. TRIP TUBING OUT OF HOLE.
- 8. RIG UP WIRELINE. PERFORATE THE FRUITLAND COAL INTERVAL WITH .50" HOLES AT 4 JSPF USING A 4" CASING GUN AS FOLLOWS:

1777 - 1781	4 FT	16 HOLES
1800 - 1810	10 FT	40 HOLES
1816 - 1819	3 FT	12 HOLES
1820 - 1823	3 FT	12 HOLES
1824 - 1826	2 FT	8 HOLES
TOTAL	22 FT	88 HOLES

(NOTE: PERFORATIONS MAY CHANGE SLIGHTLY AFTER GR LOG ANALYSIS)

- 9. TRIP IN HOLE WITH INFLATABLE FACKER ON 2-7/8" TUBING. SET PACKER AT 1813'.
- 10. RIG UP PUMP TRUCK. BREAKDOWN UPPER FRUITLAND COAL PERFORATIONS DOWN THE ANNULUS AND BASAL FRUITLAND COAL PERFORATIONS DOWN THE TUBING. RECORD ALL RATES AND PRESSURES.
- 11 MOUE THRING OND DACKER UPHOLE AND SET AT +/- 17001.

12. FRACTURE STIMULATE ENTIRE FRUITLAND COAL INTERVAL THROUGH 2-7/8" TUBING WITH 64,000 GALLONS OF 70 QUALITY NITROGEN FOAM (FLUID IS 20# GUAR GEL) CONTAINING 10,000# 40/70 MESH SAND FLUID LOSS ADDITIVE AND 80,000# 20/40 MESH SAND PROPPANT AS FOLLOWS:

10,000 GALS OF 70 QUALITY FOAM PAD
5,000 GALS OF 1 PPG 40/70 SAND
5,000 GALS OF 70 QUALITY FOAM SPACER
5,000 GALS OF 1 PPG 40/70 SAND
5,000 GALS OF 70 QUALITY FOAM SPACER
10,000 GALS OF 1 PPG 20/40 SAND
10,000 GALS OF 2 PPG 20/40 SAND
8,000 GALS OF 3 PPG 20/40 SAND
4,000 GALS OF 4 PPG 20/40 SAND
2,000 GALS OF 5 PPG 20/40 SAND
425 GALS OF 70 QUALITY FOAM FLUSH

DESIRED RATE: 25 BPM
EXPECTED TREATING PRESSURE: 2500 PSI

(NOTE: ALL WATER TO CONTAIN 1% KCL AND 1/2 GAL/1000 CLAY STABILIZATION AGENT)

- 13 . SHUT WELL IN LONG ENOUGH TO OBSERVE FRACTURE CLOSURE PRESSURE.
- 14. FLOW WELL BACK TO THE ATMOSPHERE THROUGH A 1/2" TAPPED BULLPLUG UNTIL THE WELL CLEANS UP OR DIES.
- 15 . RELEASE PACKER AND TRIP 2-7/8" TUBING OUT OF HOLE, LAYING DOWN THE WORK STRING.
- 16 . PICK UP 2-3/8" TUBING AND RUN IN HOLE WITH A NOTCHED COLLAR ON THE END AND A SEATING NIPPLE 1 JOINT UP. CLEAN OUT SAND AS NECESSARY.
- 17 . LAND TUBING AT +/- 1800'. NIPPLE DOWN BOP AND NIPPLE UP WELLHEAD.
- 18 . SWAB WELL IN IF NECESSARY. FLOW WELL TO CLEANUP FOR AOF.