Form 3160-5 (June 1990)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED

Budget Bureau No. 1004-0135

Expires: March 31, 1993

	Expires:	March	31, 199	73
Lease	Designat	on and	Serial	No.

SF-078863 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 Well 8. Well Name and No. 2. Name of Operator Krause #60 R & G Drilling Company C/O KM Production Company 9. API Well No. 3. Address and Telephone No 30-045-22286 PO Box 2406, Farmington, NM 87499 (505)325-6900 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) Kutz Fruitland 11. County or Parish, State 810' FNL & 1850' FEL Sec. 33, T28N, R11W San Juan, NM 12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION Notice of Intent Abandonment Change of Plans Recompletion **New Construction** Subsequent Report Plugging Back Non-Routine Fracturing Casing Repair Water Shut-Off Final Abandonment Notice Altering Casing Conversion to Injection Other Recompletion Fruitland Coal → 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 markers and zones pertinent to this work.)* As per attached procedures.

Signed Hereby certify that the foreguinh a rule and correct	Title	Petroleum Engineer	Dete 9-29-92	
(This space for Federal or State office use) Approved by	Title		ACPROVED	
Conditions of approval, if any:		<	AREA MANAGO	
Title 18 U.S.C. Section 1001, makes it a crime for any person known	owingly and willful	ly to make to any department or agency	of the United States any false, fictitively de fraudulent states	

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*See Instruction on Reverse Side

FRUITLAND COAL RE-COMPLETION PROGNOSIS R & G DRILLING CO. KRAUSE #60 NWNE SEC 33, T28N R11W SAN JUAN COUNTY, NEW MEXICO

EXISTING TUBULARS

CASING: 4-1/2" 10.5 #/FT K-55 SET @ 2003' TUBING: 1-1/4" 2.4 #/FT J-55 SET @ 1670'

EXISTING PERFORATIONS

FRUITLAND SAND: 1669 - 1678 @ 2SPF

NOTE: PBTD AT 1965'. PC ZONE IS NOT PERFORATED!

PROCEDURE

- 1. MOVE IN AND RIG UP COMPLETION UNIT. SET ANCHORS IF NECESSARY.
- 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 AND VALVES IF NECESSARY.
- 4. TRIP 1-1/4" TUBING OUT OF HOLE. LAYDOWN TUBING ON FLOAT.
- 5. PICK UP 4 1/2" RETRIEVABLE PACKER AND 2-3/8" 4.7 #/FT J-55 TUBING. SET PACKER ABOVE AND BELOW EXISTING FRUITLAND SAND PERFORATIONS AND PRESSURE TEST 4 1/2" CASING TO 3000 PSI.
- 6. MOVE PACKER TO +/- 1100'. RIG UP CEMENTERS. SQUEEZE CEMENT EXISTING FRUITLAND SAND PERFORATIONS (1669'- 1678') WITH 100 SACKS OF CLASS B CEMENT WITH 3% CaCl2. SQUEEZE PERFORATIONS TO 2500 PSI. REVERSE CIRCULATE ANY EXCESS CEMENT. WAIT ON CEMENT TO SET.
- 7. TRIP TUBING AND PACKER OUT OF HOLE. TRIP IN HOLE WITH 3 7/8" BIT AND CASING SCRAPER ON TUBING. DRILL CEMENT REMAINING IN CASING.
- 8. PRESSURE TEST CASING TO 3000 PSI. RESQUEEZE IF NECESSARY.
- 9. MOVE TUBING TO PBTD. CIRCULATE HOLE CLEAN WITH FRESH WATER. TRIP TUBING OUT OF HOLE.
- 10. RIG UP WIRELINE. PERFORATE THE FRUITLAND COAL INTERVAL WITH .40" HOLES AT 4 JSPF USING A 3 1/8" CASING GUN AS FOLLOWS:

1803 - 1806 1827 - 1833 1862 - 1872	3 FT 6 FT 10 FT	12 HOLES 24 HOLES 40 HOLES
TOTAL	19 FT	76 HOLES

NOTE: CORRELATION LOG ALREADY EXISTS!

- 11 . PICK UP RETRIEVABLE PACKER ON TUBING. SET PACKER AT +\- 1700'.
- 12 . RIG UP PUMP TRUCK. BREAKDOWN FRUITLAND COAL PERFORATIONS DOWN THE TUBING. ESTABLISH AN INJECTION RATE AND PRESSURE. ACIDIZE THIS INTERVAL WITH 500 GALLONS OF 7 1/2% DI HCL ACID CONTAINING 114 7/8" RCN BALL SEALERS. ATTEMPT TO BALLOFF CASING TO 2500 PSI.
- 13. MOVE TUBING AND PACKER TO PBTD TO KNOCK BALLSEALERS OFF PERFORATIONS. TRIP TUBING AND PACKER OUT OF HOLE.
- 14. FRACTURE STIMULATE THE FRUITLAND COAL INTERVAL DOWN 4 1/2" CASING WITH 54,000 GALLONS OF 70 QUALITY NITROGEN FOAM (FLUID IS 20# GUAR GEL) CONTAINING 5,000# 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
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
FLUSH WITH 70 QUALITY FOAM TO TOP PERFORATION

DESIRED RATE: 20 BPM
EXPECTED TREATING PRESSURE: 1200 TO 1700 PSI

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

- 15. SHUT WELL IN LONG ENDUGH TO OBSERVE FRACTURE CLOSURE PRESSURE.
- 16 . FLOW WELL BACK TO THE ATMOSPHERE THROUGH A 1/2" TAPPED BULLPLUG UNTIL THE WELL CLEANS UP OR DIES.
- 17. TRIP THE 2-3/8" TUBING BACK IN THE HOLE WITH A NOTCHED COLLAR ON THE END AND A SEATING NIFPLE 1 JOINT UP. CLEAN OUT SAND AS NECESSARY.
- 18 . LAND TUBING AT +/- 1830'. NIPPLE DOWN BOP AND NIPPLE UP WELLHEAD.
- 19 . SWAB WELL IN IF NECESSARY. FLOW WELL TO CLEANUP FOR AOF.

Submit to Appropriate District Office State Lease - 4 copies Fee Lease - 3 copies

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised 1-1-89

DISTRICT I P.O. Box 1980, Hobbs, NM 88240

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT III
1000 Rio Brazos Rd., Azzec, NM 87410

DISTRICT II P.O. Drawer DD, Artesia, NM 88210

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section Operator Well No R & G Drilling Co. C/O KM Production Co. Krause Ung Letter 60 Section Township Range County 28N 11W Actual Footage Location of Well: **NMPM** San Juan 810 feet from the North line and 1850 feet from the East Ground level Elev. line Producing Formation Proj Dedicated Acreage: 5993 Fruitland Coal Basin Fruitland Coal 1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below. 320 Acres 2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty). 3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.? Yes ∐ No If answer is "yes" type of consolidation If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if neccessary. No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division. OPERATOR CERTIFICATION I hereby certify that the information contained herein in true and complete to the best of my knowledge and belief. Signature em Printed Name Kevin H. McCord Position Petroleum Engineer Company KM Production Company ϖ Date 5. 3 9-28-92 SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervison, and that the same is true and correct to the best of my knowledge and belief. Date Surveyed OCT 0 2: 1992 Signature & Seal of Professional Surveyor OIL CON. DIV. , DIST. 3 Original plat on file Ceruficate No. 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500