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

5. Lease Designation and Serial No.

Approved by	Tide	Date	
(This space for Federal or State office use)		SEP 22 1997	
4. I hereby certify that the foregoing is trye/and correct Signed	Tide PETROLEUM ENGINEER	ACCEPTED FOR RECORD Date 9/22/97	
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	generalization in the production of the second seco		
PLEASE SEE ATTACHED MORNING R	EPORT.		
give subsurface locations and measured and true vertical depths for	or all markers and zones pertinent to this work.)*	ν ^Λ	
Describe Proposed or Completed Operations (Clearly state all pertinent of	FRUITLAND COAL	(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)	
Final Abandonment Notice	Altering Casing Other RECOMPLETION TO BAS	Conversion to Injection IN Dispose Water	
Subsequent Report	Plugging Back Casing Repair	Non-Routine Fracturing Water Sout-Off	
Notice of Intent	Abandonment Recompletion	Change of Plans New Construction	
TYPE OF SUBMISSION	TYPE OF ACTIO	NC	
	NDICATE NATURE OF NOTICE, REP		
1745' FSL & 1580" FWL SEC. 28, T2	8N. R11W	SAN JUAN COUNTY, NEW MEX	
Location of Well (Footage, Sec., T., R., M., or Survey Description)		11. County or Parish, State	
Address and Telephone No. (505)325-6900 C/O KM PRODUCTION COMPANY PO BOX 2406 FARMINGTON, NM 87499		30-045-07153 10. Field and Fool, or Exploratory Area	
M & G DRILLING COMPANY		9. API Well No.	
Oil Gas Weil Other Name of Operator		8. Well Name and No. KRAUSE #11	
Type of Well			
SUBMIT IN TRIPLICATE		7. If Unit or CA, Agreement Designation	
o not use this form for proposals to drill or to Use "APPLICATION FOR PERM	deepen or reentry to a different reservoi IT—" for such proposals	r.	
	EPORTS ON WELLS	6. If Indian, Allottee or Tribe Name	

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. NMOCD-

M&G DRILLING COMPANY KRAUSE #11

1745 FSL & 1580 FWL NESW, SECTION 28, T28N R11W SAN JUAN COUNTY, NEW MEXICO

BASIN FRUITLAND COAL RECOMPLETION

- 9/11/97 Move in and rig up Aztec Well Service Rig #107. Blowdown well. Nipple down wellhead and nipple up BOP. Trip 54 joints of 2 3/8" tubing and a packer out of hole. The packer was sealing off the Pictured Cliffs formation, not a cast iron bridgeplug as expected. Pick up a used bit and casing scraper. Trip in hole and tag fill at 1713 ft. Trip tubing out of hole and shut down for the night.
- Rigged up Blue Jet Wireline Services. Ran GSL log from 1714 ft KB to 1000 ft. Set cast iron bridge plug with wireline at 1694 ft. Pick up 5 ½" fullbore packer on tubing. Trip packer in hole and set at 1152 ft. Rigged up Cementers, Inc pump truck. Pressure tested casing from 1152 ft to 1694 ft to 1000 psi, held OK. Moved tubing to 1090 ft. Tested casing from surface to 1090 ft to 1000 psi, held OK. Moved packer to 720 ft. Squeeze cemented Farmington perforations from 1105-1118 ft with 50 sacks (59 ft3) of Class B cement containing 2% CaCl. Squeezed to 1000 psi. Reversed out excess cement from tubing. Reset packer and left 500 psi on tubing. Estimated top of cement from squeeze at 810 ft. Shut down for the night.
- 9/13/97 Bled down pressure and released packer. Tripped tubing out of hole, laying down on float. Had four hours of rig downtime. Picked up bit, casing scraper, and 2 3/8" yellowband tubing. Tripped in hole and tagged cement at 756 ft. Drilled 124 ft of cement to 880 ft. Shut down for the weekend.
- 9/14/97 Shut down for Sunday.
- 9/15/97 Drilled 190 ft of cement to 1070 ft. Shut down for the night.
- Drilled 53 more feet of cement and fell through cement at 1123 ft. Pressure tested casing and squeeze to 1000 psi, held OK. Trip tubing in hole and tagged bridge plug at 1694 ft. Rigged up Cementers Inc. pump truck. Circulated hole clean with fresh water. Spotted 250 gallons of 7 ½ % DI HCl acid. Tripped tubing, casing scraper, and bit out of hole. Rigged up Blue Jet wireline. Perforated the Fruitland Coal interval with 3 1/8" casing guns and 4 JSPF as follows:

1637 - 1641	4 ft	16 holes	
1658 - 1668	10 ft	40 holes	
1683 - 1693 Total	10 ft 10 ft 24 ft	40 holes 96 holes	.34" diameter

Shut down for the night.

9/17/97 Picked up packer and 2 7/8" 6.4 #/ft NUE yellowband tubing for frac string. Set packer at 1678 ft. Broke down upper and middle Fruitland Coal perforations (1637-1641 and 1658-1668) down the annulus immediately and established an injection rate into perforations of 2.8 BPM @ 690 psi, ISIP of 450 psi (.71 frac

gradient). Broke down lower Fruitland Coal perforations (1683-1693) down the tubing immediately and established an injection rate into perforations of 2.8 BPM @ 690 psi, ISIP of 450 psi (.71 frac gradient). Moved packer to 1588 ft. Fracture Stimulated all Fruitland Coal perforations down the tubing with 39,000 gallons of 70 quality foam (fluid is 20# linear guar gel containing 1% KCl, bacteriacide, PH buffer, and enzyme breaker) and 35,500 lbs of 40/70 and 20/40 mesh sand as follows:

5,000 gal 70 foam pad 20 BPM @ 2550 psi blender broke down, 1 ½ hours for repair then started frac again

5,000 gal 70 foam pad	20 BPM @ 2900 psi
10,000 gal 70 foam with 1 ppg 40/70 sa	and 20 BPM @ 2700 psi
4,000 gal 70 foam with 1 ppg 20/40 sa	and 20 BPM @ 2550 psi
10,000 gal 70 foam with 2 ppg 20/40 sa	and 20 BPM @ 2500-3550 psi
500 gal 70 foam with 3 ppg 20/40 sa	and 20 BPM @ 3550-4000 psi

The well screened out on 3 ppg sand without any flush in hole. Average rate 20 BPM. Average nitrogen rate 9400 SCFM. Average pressure 2800 psi. Maximum pressure 4000 psi. Minimum pressure 2500 psi. Total nitrogen pumped 294,000 SCF. Shut well in for 3 hours. Opened well to flow to the pit through a ½" tapped bull plug. Left well flowing. Shut down for the night.

9/18/97

Well was dead this morning. Released packer and tripped out of hole with 2 7/8" tubing, laying down. Trip in hole with 2 3/8" tubing. Tagged sand at 1675 ft (bottom perforation zone covered). Circulated 19 feet of sand from hole to bridge plug at 1694 ft. Landed 2 3/8" tubing as follows:

<u>Description</u>	<u>Length</u>	<u>Depth</u>
KB to landing point	3.00	0-3
54 jts of 2 3/8" 4.7#/ft J55		
EUE yellowband used tubing	1654.76	3-1658
1 seating nipple	.75	1658-1659
1 jt of 2 3/8" tubing	30.45	1659-1689
-	1688.96	

Nipple down BOP. Nipple up wellhead. Rigged to swab. Made 25 swab runs and recovered approximately 30 barrels of water. Annulus pressure built up to - psi. Shut well in and shut down for the night.

9/19/97

Well had overnight shutin pressures of 100 psi on the tubing and 210 psi on the annulus. Blew down pressure on tubing, no further flow. Rigged to swab. Made 2 swab runs and well kicked off flowing. Well flowed for 1 ½ hours and died. Annulus pressure dropped from 210 psi to 35 psi during flow. Made 3 more swab runs and did not recover any more fluid. Shut in well and released rig.