

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 <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other	5. Lease Designation and Serial No. SF-078863
2. Name of Operator M&G Drilling Company c/o KM Production Company	6. If Indian, Allottee or Tribe Name
3. Address and Telephone No. P O Box 2406 Farmington, NM 87499 (505) 325-6900	7. If Unit or CA, Agreement Designation
4. Location of Well (Footage, Sec., T., R., M., or Survey Description) 885' FNL & 860' FEL Sec. 28, T28N, R11A Unit Letter A	8. Well Name and No. Krause #94
	9. API Well No.
	10. Field and Pool, or Exploratory Area Kutz Pictured Cliffs-West
	11. County or Parish, State San Juan, New Mexico

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 checked="" type="checkbox"/> Other <u>perforate, frac and run</u> cement casing
	<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 markers and zones pertinent to this work.)*

See attached completion report.

RECEIVED
AUG 28 1995
OIL CON. DIV.
DIST. 3

14. I hereby certify that the foregoing is true and correct.
Signed [Signature] Title Agent-Petroleum Engineer Date 8-23-95
(This space for Federal or State office use)

Approved by _____ Title _____
Conditions of approval, if any:

ACCEPTED FOR RECORD

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.

*See Instruction on Reverse Side

FARMINGTON DISTRICT OFFICE

RY

M&G DRILLING COMPANY
KRAUSE #94
885 FNL & 860 FEL
NENE, SECTION 28, T28N R11W
SAN JUAN COUNTY, NEW MEXICO

COMPLETION REPORT

8-15-95 Move in and rig up Polanco Brothers Rig #4. Nipple up wellhead and nipple up BOP. Pick up used 4 3/4" bit and 2 3/8" 4.7 #/ft EUE yellowband used tubing. Tag fill at 1717 ft RKB. Shut well in. Shut down for the night.

8-16-95 Rigged up BJ services. Pressure tested casing and wellhead to 3000 psi, held OK. Circulate hole clean with 2% KCl water. Move tubing to 1646 ft. Spot 250 gallons of 7½% DI HCL acid. Trip tubing out of hole. Rigged up Blue Jet. Ran GR-CLL from 1713 ft (PBSD) to 600 ft. Perforate Pictured Cliffs interval with 3 1/8" casing gun at 4 JSPF as follows:

1602 - 1619 ft	17 ft	68 holes
1626 - 1646 ft	<u>20 ft</u>	<u>80 holes</u>
Total	37 ft	148 holes

.34" diameter

Broke down perforations. Established an injection rate of 7.0 BPM @ 700 psi, ISIP = 400 psi (FG = 0.68). Acidize Pictured Cliffs interval with 500 gallons of 7.5% DI weighted HCL acid containing 222 1.1 sg RCN ball sealers. Saw some ball action, but did not ball off casing. Final injection rate of 7.1 BPM @ 630 psi, ISIP = 500 psi (FG = 0.74). Ran wireline junk basket and recovered 45 ball sealers. Fracture stimulated the Pictured Cliffs formation with 50,000 gallons of 70-65 quality foam in 20# guar gelled water with 110,000 pounds of 12-20 mesh sand proppant as follows:

15,000 gals 70 qual foam pad	30 BPM @ 1100-1150 psi
5,000 gals 70 qual 1 ppg 12-20 sand	30 BPM @ 1170 psi
5,000 gals 70 qual 2 ppg 12-20 sand	30 BPM @ 1180 psi
10,000 gals 70 qual 3 ppg 12-20 sand	30 BPM @ 1160 psi
10,000 gals 70 qual 4 ppg 12-20 sand	30 BPM @ 1150 psi
5,000 gals 65 qual 5 ppg 12-20 sand	30 BPM @ 1130 psi
1,600 gals 65 qual foam flush	30 BPM @ 1050 psi

ISIP = 1000 psi decreasing to 900 psi after 15 minutes. All water contained 2% KCL and ½ gal/1000 clay stabilization agent. Average rate 30 BPM, average pressure 1150 psi, maximum pressure 1200 psi, minimum pressure 1000 psi, Average nitrogen rate 9,500 SCF, total nitrogen pumped 376,000 SCF, total fluid to recover 342 bbls. Shut well in for 4 hours. Blew well back to the atmosphere through a ½" tapped bull plug with a 1/8" insert. Left well flowing to the pit to cleanup. Shut down for the night.

8-17-95 Well flowing to pit through tapped bullplug with 200 psi, 12 hours after opening after frac. After 24 hours from frac, well was blowing hard to the pit and making burnable gas.

8-18-95 Well was still flowing this morning with 280 psi. Remove choke from blowline. Well still did not blowdown. Pumped pit of fluid in well and finally killed well. Tripped in hole with tubing and tagged sand fill at 1653 ft RKB (just below perforations). Attempted to circulate sand from hole, but well went on a vacuum. Tripped tubing out of hole. Picked up a hydrostatic sand bailer on tubing and tripped in hole. Cleaned out 64 feet of sand to PBTD. Tripped tubing and bailer out of hole. Tripped in hole with tubing and landed as follows:

<u>Description</u>	<u>Length</u>	<u>Depth</u>
KB to landing point	4.00	0-4
52 jts of 2 3/8" 4.7#/ft J55		
EUE yellowband used tubing	1607.81	4-1612
1 seating nipple	1.00	1612-1613
1 jt of 2 3/8" tubing	30.05	1613-1643
1 sawtooth collar	.50	1643-1643
	1643.36	

Nipple down BOP. Nipple up wellhead. Rigged to swab. Made a total of 26 swab runs recovering 52 bbls of 116 bbls pumped. Tubing was gassing heavily after swab runs. Annulus pressure built to 80 psi. Shut in well and shutdown for the night.

8-19-95 Overnight pressures: tubing 40 psi, annulus 170 psi. Blowdown tubing immediately. Rigged to swab. Initial fluid level at 500 ft. Made 31 swab runs and recovered 61 barrels of fluid. Well kicked off flowing. Rigged down completion unit and released rig. Left well flowing to the pit through a 1/2" choke to cleanup.

8-20-95 Well flowing to pit to cleanup.

8-21-95 Well flowing to pit with 240 psi on the annulus and 150 psi flowing tubing pressure on a 1/2" choke. Shut well in. Wait on gas sales connection.