

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SUBMIT IN DUPLICATE
(See other In-
structions on
reverse side)

FOR APPROVED
OMB NO. 1004-0137

Expires: December 31, 1991

5. LEASE DESIGNATION AND SERIAL NO.
SF-078481A

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME, WELL NO.

Graham #99

9. API WELL NO.

30-045-29917

10. FIELD AND POOL, OR WILDCAT

Basin Fruitland Coal

11. SEC., T., R., M., OR BLOCK AND SURVEY
OR AREA

Sec. 10, T27N R8W

12. COUNTY OR
PARISH

San Juan

13. STATE

New Mexico

WELL COMPLETION OR RECOMPLETION REPORT AND LOG *

1a. TYPE OF WELL:

OIL WELL ☐ GAS WELL ☒ DRY ☐

99 JUL 12 PM 4:25

b. TYPE OF COMPLETION:

NEW WELL ☒ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐

070 FARMINGTON, NM

2. NAME OF OPERATOR

M&G Drilling Company, Inc. c/o KM Production Company

3. ADDRESS AND TELEPHONE NO.

P.O. Box 2406 Farmington, NM 87499-2406 (505) 325-6900

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements)

At surface

1150 FSL & 790 FWL

At top prod. interval reported below

At total depth

14. PERMIT NO.

DATE ISSUED

DIST. 3

12. COUNTY OR PARISH

San Juan

13. STATE

New Mexico

15. DATE SPUDDED

6/8/1999

16. DATE T.D. REACHED

6/13/1999

17. DATE COMPL. (Ready to prod.)

6/30/1999

18. ELEVATIONS (DF, RKB, RT, FE, ETC.) *

5873 GR

19. ELEV. CASINGHEAD

20. TOTAL DEPTH, MD & TVD

2170 Ft

21. PLUG, BACK T.D., MD & TVD

2131 Ft

22. IF MULTIPLE COMPL., HOW MANY *

23. INTERVALS DRILLED BY

ROTARY TOOLS

CABLE TOOLS

XX

24. PRODUCING INTERVAL(S), OF THIS COMPLETION - TOP, BOTTOM, NAME (MD AND TVD) *

1955 - 2050 Fruitland Coal

25. WAS DIRECTIONAL SURVEY MADE

No

26. TYPE ELECTRIC AND OTHER LOGS RUN

Dual Induction - GR - Density

27. WAS WELL CORED

No

28. CASING RECORD (Report all strings set in well)

CASING SIZE / GRADE	WEIGHT, LB. / FT.	DEPTH SET (MD)	HOLE SIZE	TOP OF CEMENT, CEMENTING RECORD	AMOUNT PULLED
7"	23 #/Ft	124 Ft	8 3/4"	60sx (71 ft3) Class B W/4% CaCl, Cement Circulated	
4 1/2"	10.5 #/Ft	2179 Ft	6 1/4"	170sx (350 ft3) Class B W/2% Econolite, tailed with	
				90sx (106 ft3) Class B, Cement Circulated	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT *	SCREEN (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
None					2 3/8"	2049 Ft	None

31. PERFORATION RECORD (Interval, size and number)

1955 - 1968 with 27 - .34" diameter holes
1996 - 2002 with 13 - .34" diameter holes
2026 - 2050 with 49 - .34" diameter holes

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
1955 - 2050	750 gal 15% HCl acid
	45,000 gal 70 quality foam, 110,000 Lbs 20/40 san

33. * PRODUCTION

DATE OF FIRST PRODUCTION		PRODUCTION METHOD (Flowing, gas lift, pumping - size and type of pump)				WELL STATUS (Producing or shut-in)	
6/30/1999		Flowing				Shut-in	
DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD	OIL - BBL.	GAS - MCF.	WATER - BBL.	GAS - OIL RATIO
6/30/1999	3 Hrs.	3/4"			No flow		
FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24 - HOUR RATE	OIL - BBL.	GAS - MCF.	WATER - BBL.	OIL GRAVITY - API (CORR.)	
0 psi	70 psi			No flow			

34. DISPOSITION OF GAS (Sold, used for fuel, vented, etc.)

Shut-in waiting on gas connection

TEST WITNESSED BY

Albert Aranda

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED

TITLE Petroleum Engineer

DATE

7/6/99

*(See Instructions and Spaces for Additional Data on Reverse Side)

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency

NMOCD

ACCEPTED FOR RECORD

FARMINGTON FIELD OFFICE
BY

37. SUMMARY OF POROUS ZONES: (Show all important zones or porosity and contents thereof; cored intervals; and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):

37. SUMMARY OF POROUS ZONES: (Show all important zones or porosity and contents thereof, cored intervals, and all drill-stem, tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries):					38. GEOLOGIC MARKERS		
FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.	NAME	TOP		
					MEAS. DEPTH	TRUE VERT. DEPTH	
Ojo Alamo	1188	1298	Sandstone	Ojo Alamo	1188	1188	
Kirtland Shale	1298	1818	Sandstone, shale, siltstone	Kirtland	1298	1298	
Fruitland	1818	2057	Sandstone, siltstone, shale Coal, natural gas & water	Fruitland	1818	1818	
Pictured Cliffs	2057	TD	Sandstone	Pictured Cliffs	2057	2057	

M&G DRILLING COMPANY
GRAHAM #99
1150 FSL & 790 FWL (SWSW)
SECTION 10, T27N, R8W

COMPLETION REPORT

6-28-99 Move in and rig up JC Well Service completion rig. Nipple up wellhead and BOP. Rigged up Blue Jet Wireline. Ran GR-CLL-CBL (under 500 psi) from 2131 ft RKB PBTD to 1100 ft. Good cement bond throughout completion interval. Pressure tested casing to 3000 psi, held OK. Perforated the Fruitland Coal interval with 3 1/8" casing gun at 2 JSPF as follows:

1955 - 1968 ft	13 ft	27 holes	
1996 - 2002 ft	6 ft	13 holes	
<u>2026 - 2050 ft</u>	<u>24 ft</u>	<u>49 holes</u>	
Total	43 ft	89 holes	.34" diameter

Pick up Arrow Completion packer and 2 3/8" tubing. Trip packer and tubing to 2050 ft. Shut down for the night.

6-29-99 Rigged up Dowell. Spot 250 gallons of 7 1/2% HCl acid across perforation interval. Move tubing and packer to 2014 ft and set packer (between upper and lower Fruitland Coal perforation intervals). Broke down lower Fruitland Coal intervals (2026-2050) immediately. Established an injection rate of 4.0 BPM @ 1100 psi, ISIP of 450 psi (0.65 frac gradient). Broke down upper Fruitland Coal intervals down the annulus at 1050 psi. Established an injection rate of 4.2 BPM @ 900 psi, ISIP of 650 psi (0.76 frac gradient). Moved tubing and packer to 1849 ft and set packer (above both sets of Fruitland Coal perforations). Acidized the entire Fruitland Coal interval with 500 gallons of 7.5% DI weighted HCL acid containing 134 1.1 sg RCN ball sealers down the tubing at 3.8 BPM @ 1020 psi. Saw some ball action but did not ball off casing. Final injection rate was 3.5 BPM @ 1600 psi, ISIP of 800 psi (0.83 frac gradient). Tripped tubing and packer to PBTD to knock ball sealers off of perforations. Trip tubing and packer out of hole. Fracture stimulated the Fruitland Coal interval with 45,000 gallons of 70 quality foam using 30# linear gelled fluid containing 110,000 lbs of 20-40 mesh Arizona sand as follows:

10,000 gals of 70 qual foam pad	30 BPM @ 1650 psi
5,000 gals of 70 qual foam with 1 ppg 20-40 sand	30 BPM @ 1750 psi
5,000 gals of 70 qual foam with 2 ppg 20-40 sand	30 BPM @ 1850 psi
10,000 gals of 70 qual foam with 3 ppg 20-40 sand	30 BPM @ 1900 psi
10,000 gals of 70 qual foam with 4 ppg 20-40 sand	30 BPM @ 2050 psi
5,000 gals of 70 qual foam with 5 ppg 20-40 sand	30 BPM @ 2200-3000 psi
1,200 gals of 70 qual foam flush	30 BPM @ 3000-3200 psi

ISIP = 2900 psi decreasing to 2600 psi after 15 minutes. All water contained 2% KCL, 1/2 gal/1000 clay stabilization agent, and bactericide. Sand contained multiple

radioactive tracer material as follows: 5 mc Sb-124 in 1 and 2 ppg sand stages, 30 mc Ir-192 in 3 and 4 ppg sand stages, 10 mc Sc-46 in 5 ppg sand stage. Average rate 30 BPM, average pressure 1900 psi, maximum pressure 3200 psi, minimum pressure 1600 psi, average nitrogen rate 10,500 scfm, total nitrogen pumped 439,200 scf, total fluid to recover 380 bbls. Shut well in for 3 hours. Blow well back to pit through a 1/4" inline choke. Well flowing to cleanup. Shut down for the night.

6-30-99 Well is still flowing to the pit this morning. Killed well. Trip in hole with tubing and tagged sand fill at 2113 ft (63 ft below bottom perforation). Moved tubing up hole and landed as follows:

<u>Description</u>	<u>Length</u>	<u>Depth</u>
KB to landing point	3.00	0-3
2 3/8" tubing subs	12.00	3-15
64 jts of 2 3/8" 4.7#/ft J55 EUE		
yellow band used tubing	1999.76	15-2015
1 seating nipple	1.10	2015-2016
1 jt of 2 3/8" used tubing	<u>32.93</u>	2016-2049
	2048.79	

Nipple down BOP and nipple up wellhead. Rigged to swab. Made 1 swab run and well started flowing. Left well flowing to pit to cleanup. Released rig. End of Report.