

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

FORM APPROVED

OMB No. 1004-0136

Expires November 30, 2000

APPLICATION FOR PERMIT TO DRILL OR REENTER

2004 DEC 6 PM 2

5. Lease Designation and Serial No.

SP-078487A NMNM-05791

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement, Name and No.

8. Lease Name and Well No.

GRAHAM 10 #9

9. API Well No.

30-045-32729

10. Field and Pool, or Exploratory

BLANCO MESAVERDE

11. Sec., T., R., M., or Blk. and Survey or Area

Sec 10, T-27-N, R-8-W

12. County or Parish,

San Juan

13. State

New Mexico

17. Spacing Unit dedicated to this well

320 Acres E/2

1a. Type of Work

☒ DRILL

☐ REENTER

1b. Type of Well:

☐ Oil Well

☒ Gas Well

☐ Other

☐ Single Zone

☐ Multiple Zone

2. Name of Operator

M&G Drilling Company Inc.

NM OGRID # 141852

3a. Address

c/o Mike Pippin LLC

3b. Phone Number

3104 N. Sullivan, Farmington, NM 87401

(505) 327-4571

4. Location of Well (Footage, Sec, T. R., M., or Survey Description)

At surface: Unit P, 1010' FSL, 700' FEL

At proposed prod. Zone: Same

14. Distance in miles and direction from nearest town or post office\*

~14 Miles South of Blanco, NM

15. Distance from proposed\*

location to nearest 700'

property or lease line, ft.

(Also to nearest drig. Unit line, if any)

16. No. of Acres in lease

7680

18. Distance from proposed\*

location to nearest well 854'

19. Proposed Depth

4800'

20. BLM/BIA Bond No. on file

21. Elevation (Show whether DF, KDB, RT, GL, etc.)

5975'

22. Approximate date work will start\*

June 10, 2005

23. Estimated duration

30 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.

2. A Drilling Plan

3. A Surface Use Plan (if the location is on National Forest System Lands, the

SUPO shall be filed with the appropriate Forest Service Office.

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).

5. Operator certification.

6. Such other site specific information and/or plans as may be required by the authorized officer

Size of Hole	Grade, Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
12-1/4"	9-5/8" H-40	32.3#	200'	106 Sxs, 125 ft3 - 100% Excess
8-3/4"	7" K-55	20#	1800'	214 Sxs, 393 ft3 - 45% Excess
6-1/4"	4-1/2" K-55	11.6#	4800'	327 Sxs, 657 ft3 - 45% Excess

The on-site inspection was on 10/12/04 by Brice Barlan

Archy is by DCA.

EA is by Nelson

SEE ATTACHED APD INFORMATION

Latitude: 36 Deg, 35 Min, 2.7 Sec N  
Longitude: 107 Deg, 39 Min, 46.1 Sec W

25. Signature

Mike Pippin

Name(Printed/Typed)

Mike Pippin

Date

December 4, 2004

Title Petroleum Engineer

Approved by (Signature)

Jim Lovel

Name(Printed/Typed)

Office

Date

3/11/05

Title Field Manager - Minerals

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make 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.

(Instructions on reverse)

NMOCD

DISTRICT I  
1625 N. French Dr., Hobbs, N.M. 88240

DISTRICT II  
811 South First, Artesia, N.M. 88210

DISTRICT III  
1000 Rio Brazos Rd., Aztec, N.M. 87410

DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, NM 87505

Form C-102  
Revised August 15, 2000

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 30045-32729	<sup>2</sup> Pool Code 72319	<sup>3</sup> Pool Name BLANCO MESAVERDE
<sup>4</sup> Property Code 33348	<sup>5</sup> Property Name GRAHAM 10	<sup>6</sup> Well Number 9
<sup>7</sup> UGRD No. 141852	<sup>8</sup> Operator Name M & G DRILLING COMPANY	<sup>9</sup> Elevation 5975'

<sup>10</sup> Surface Location

UL or lot no. P	Section 10	Township 27-N	Range 8-W	Lot Idn	Feet from the 1010	North/South line SOUTH	Feet from the 700	East/West line EAST	County SAN JUAN
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<sup>11</sup> Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
<sup>12</sup> Dedicated Acres 320 E/2		<sup>13</sup> Joint or Infill Y		<sup>14</sup> Consolidation Code		<sup>15</sup> Order No.			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16

FD. 3 1/4" BC. 1955 B.L.M.	FD. 3 1/4" BC. 1955 B.L.M.	FD. 3 1/4" BC. 1955 B.L.M.	FD. 3 1/4" BC. 1955 B.L.M.
LAT. = 36°35'02.7" N. (NAD 83) LONG. = 107°39'46.1" W. (NAD 83)		N 02-03-04 E 5398.5' (M)	
10		700'	
1010'		700'	
FD. 3 1/4" BC. 1955 B.L.M.		FD. 3 1/4" BC. 1955 B.L.M.	

17 OPERATOR CERTIFICATION  
I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.  
Mike Pippix  
Signature  
MIKE PIPPIX  
Printed Name  
AGENT-PETR. ENGR  
Title  
12-6-04  
Date

18 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 supervision, and that the same is true and correct to the best of my belief.  
SEPTEMBER 09 2004  
Date of Survey  
Signature and Seal of Professional Surveyor  
14831  
Certificate Number

Submit 3 Copies To Appropriate District  
Office  
District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Ave., Artesia, NM 88210  
District III  
1000 Rio Brazos Rd., Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM  
87505

State of New Mexico  
Energy, Minerals and Natural Resources

Form C-103  
March 4, 2004

OIL CONSERVATION DIVISION  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

WELL API NO.
5. Indicate Type of Lease <b>Federal</b> STATE <input type="checkbox"/> FEE <input type="checkbox"/>
6. State Oil & Gas Lease No. <b>Federal: SF-078481A</b>
7. Lease Name or Unit Agreement Name <b>GRAHAM 10</b>
8. Well Number #9
9. OGRID Number 141852
10. Pool name or Wildcat Blanco Mesaverde

**SUNDRY NOTICES AND REPORTS ON WELLS**  
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other
2. Name of Operator <b>M &amp; G DRILLING COMPANY</b>
3. Address of Operator c/o Agent, Mike Pippin LLC 3104 N. Sullivan, Farmington, NM 87401 505-327-4573
4. Well Location

Unit Letter P : 1010 feet from the South line and 700 feet from the East line

Section 10 Township 27N Range 8W NMPM San Juan County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
5975' GL

**Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached)**

Pit Location: UL P Sect 10 Twp 27N Rng 8W Pit type: Drilling Depth to Groundwater >100' Distance from nearest fresh water well >1000'.  
Distance from nearest surface water <200' Below-grade Tank Location UL Sect  Twp  Rng  ;  
feet from the  line and  feet from the  line

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:

PERFORM REMEDIAL WORK ☐ PLUG AND ABANDON ☐  
TEMPORARILY ABANDON ☐ CHANGE PLANS ☐  
PULL OR ALTER CASING ☐ MULTIPLE COMPLETION ☐  
OTHER: Drilling Pit Registration ☒

SUBSEQUENT REPORT OF:

REMEDIAL WORK ☐ ALTERING CASING ☐  
COMMENCE DRILLING OPNS. ☐ PLUG AND ABANDONMENT ☐  
CASING TEST AND CEMENT JOB ☐  
OTHER: ☐

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

We intend to drill a new MV well. The drilling pit will be built and lined according to our general pit guidelines on file at the NMOCD in Aztec, NM.

When this drilling pit is closed, it will be closed as per our general pit closing guidelines on file at the NMOCD.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒ a general permit ☐ or an (attached) alternative OCD-approved plan ☐.

SIGNATURE Mike Pippin TITLE Agent - Petroleum Engineer DATE December 6, 2004

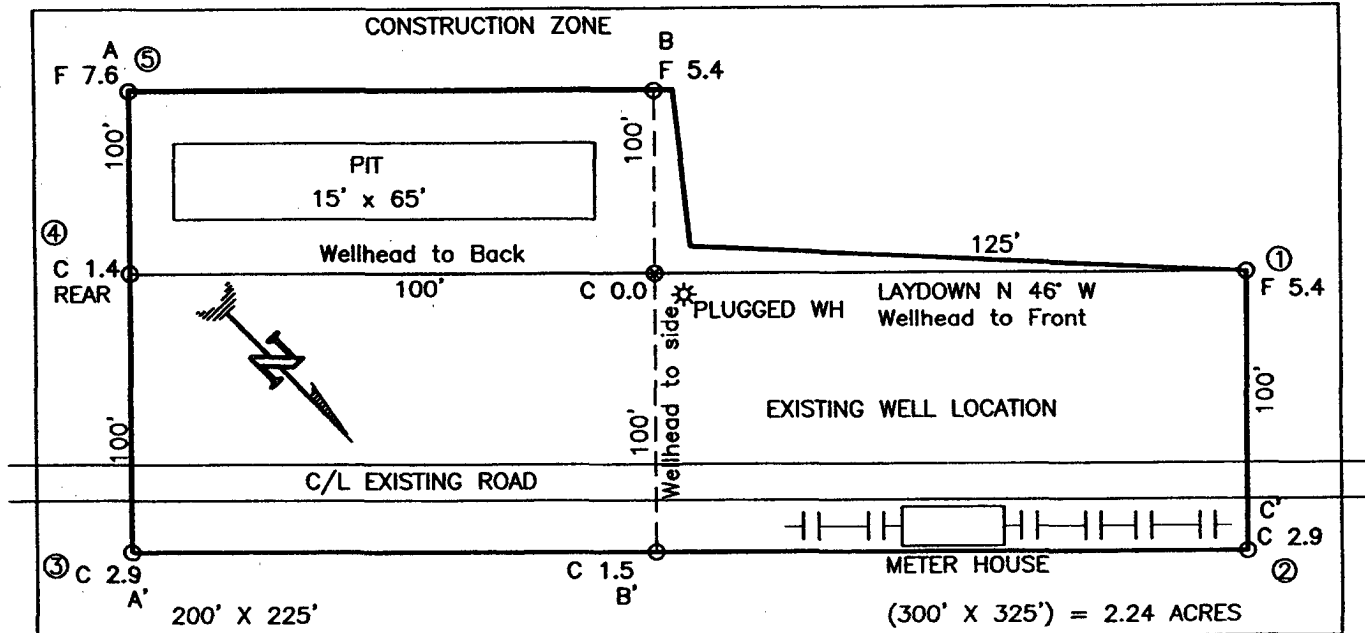
Type or print name Mike Pippin E-mail address: mpippin@ddbroadband.net Telephone No. 505-327-4573

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. 3  
Conditions of approval, if any

MAR 14 2005

M & G DRILLING COMPANY  
 GRAHAM 10 No. 9, 1010 FSL 700 FEL  
 SECTION 10, T27N, R8W, N.M.P.M., SAN JUAN COUNTY, N. M.  
 GROUND ELEVATION: 5975, DATE: SEPTEMBER 09, 2004



NOTE:

DAGGETT ENTERPRISES, INC. IS NOT LIABLE FOR  
 UNDERGROUND UTILITIES OR PIPELINES. NEW MEXICO  
 ONE CALL TO BE NOTIFIED 48 HOURS PRIOR TO  
 EXCAVATION OR CONSTRUCTION.

ELEV. A-A'

C/L

ELEV.	A-A'	C/L
5910		
5980		
5970		
5960		

ELEV. B-B'

C/L

ELEV.	B-B'	C/L
5910		
5980		
5970		
5960		

ELEV. C-C'

C/L

ELEV.	C-C'	C/L
5910		
5980		
5970		
5960		

NOTE: CONTRACTOR SHOULD CALL ONE-CALL FOR LOCATION OF ANY MARKED OR UNMARKED BURIED PIPELINES  
 OR CABLES ON WELL PAD AND OR ACCESS ROAD AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION.

PAGE #12

REVISION:	DATE:	REVISED BY:
<p><b>Daggett Enterprises, Inc.</b>          Surveying and Oil Field Services          P. O. Box 15088 • Farmington, NM 87401          Phone (505) 328-1772 • Fax (505) 328-6019          NEW MEXICO L.S. No. 14831          GRAPHIC M&amp;G018CF8          DATE 08/23/04</p>		
<p>DRAWN BY: A.G.          ROW# M&amp;G019</p>		

# **M & G DRILLING COMPANY**

**GRAHAM 10 #9 MV**

**1010' FSL, 700' FEL**

**Unit P Sec. 10 T27N R8W**

**San Juan County, NM**

## **Drilling Program**

### **1. ESTIMATED FORMATION TOPS (KB)**

<u>Formation Name</u>	<u>Depth</u>
Ojo Alamo	1299'
Kirtland	1448'
Fruitland	2016'
Pictured Cliffs	2200'
Chacra	3144'
Cliffhouse	3873'
Menefee	3897'
Point Lookout	4453'
TD (4-1/2")	4800'

### **2. NOTABLE ZONES**

<u>Gas or Oil Zones</u>	<u>Water Zones</u>	<u>Coal Zone</u>
Fruitland	Ojo Alamo	Fruitland
Pictured Cliffs	Kirtland	
Chacra		
Cliffhouse		
Menefee		
Point Lookout		

Water zones will be protected with casing, cement, and weighted mud. Fresh water found while drilling will be recorded. Oil or gas shows will be tested for commercial potential based on the engineer's recommendations.

### **3. PRESSURE CONTROL**

Maximum expected pressure is ~800 psi. The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical 11" 3,000 psi model BOP and choke manifold is on PAGE #5 & #6.

BOP equipment and all accessories will meet or exceed BLM requirements in 43 CFR Part 3160 for a 3000 psi system. A 3000 psi double ram hydraulic BOP will be used.

## **M & G DRILLING COMPANY**

**GRAHAM 10 #9 MV**

**1010' FSL, 700' FEL**

**Unit P Sec. 10 T27N R8W**

**San Juan County, NM**

Accumulator system capacity will be sufficient to close all BOPE with a 50% safety factor. Fill, kill, and choke manifold lines will be 2". Accessories will include upper and lower Kelly cocks with handles, stabbing valve to fit drill pipe on floor at all times, string float at bit, 3000 psi choke manifold with 2" adjustable and 2" positive chokes, and pressure gauge. BOPs will be tested every 24 hours. Tests will be recorded on IADC log.

#### **4. CASING & CEMENT**

<u>Hole Size</u>	<u>O.D.</u>	<u>Weight (lb/ft)</u>	<u>Grade</u>	<u>Age</u>	<u>Connection</u>	<u>GL Setting Depth</u>
12-1/4"	9-5/8"	32.3#	H-40	New	ST&C	200'
8-3/4"	7"	20#	K-55	New	ST&C	1800'
6-1/4"	4-1/2"	11.6#	K-55	New	ST&C	4800'

**Surface Casing** will be cemented to the surface with ~125 cu. ft. (~106 sx) Class "B" cmt or equivalent (1.18 ft<sup>3</sup>/sx yield, 15.6 ppg, & 5.2 gps) with 2% CaCl<sub>2</sub> and 1/4#/sx celloflake. Volume based on 100% excess. We plan to run a minimum of at least 3 centralizers. A wooden wiper plug will be displaced to within 20' of the shoe. WOC = 12 hours. Surface casing will be tested to 500 psi for 15 minutes.

**Intermediate casing** will be cemented to surface with a single stage. Total cement = 393 cu. ft (214 sx). Volumes are calculated at 45% excess. If cement does not circulate to surface, then a temperature survey will be run to determine the actual cement top as needed. WOC = 12 hours. Test to 1000 psi for 15 minutes.

Lead cement will be ~282 cu. ft. (~134 sx) Premium Lite w/2% CaCl<sub>2</sub>, 1/4#/sx cello flake, 6-1/4#/sx gilsonite, 8% gel mixed at 11.0 gps, 12.1 ppg for a yield of 2.11 cu. ft. per sx.

Tail cement will be ~111 cu. ft. (~80 sx) Type III w/2% CaCl<sub>2</sub>, 1/4#/sx Cello flake mixed at 6.7 gps, 14.6 ppg for a yield of 1.39 cu. ft. per sx.

Cementing equipment will include a guide shoe, and autofill float collar will be run 20' off bottom. We plan on running at least 10 centralizers.

**Production Casing** will be cemented to surface with a single stage. Total cement = ~657 cu. ft. (~327sx). Volumes are calculated at 45% excess in the lead cmt. If cement does not circulate to surface, then a temperature survey or CBL will be run to determine the actual cement top as needed. WOC = 12 hours. Casing will be tested to 3800 psi for 15 minutes during completion operations.

Lead cement will be ~601 cu. ft. (~287 sx) Class "B" cmt or equivalent w/2% SM, 1/4#/sx cello flake, 3#/sx gilsonite mixed at 11.9 gps, 12.5 ppg for a yield of 2.09 cu. ft. per sx.

## **M & G DRILLING COMPANY**

**GRAHAM 10 #9 MV**

**1010' FSL, 700' FEL**

**Unit P Sec. 10 T27N R8W**

**San Juan County, NM**

Tail cement will be ~56 cu. ft. (~40 sx) Class "B" cmt or equivalent w/1% gel, 2% Cacl<sub>2</sub>, 1/4#/sx cello flake, 3#/sx gilsonite mixed at 6.8 gps, 14.5 ppg for a yield of 1.4 cu. ft. per sx.

Cementing equipment will include a guide shoe, and autofill float collar will be run 20' off bottom. We plan on running at least 10 centralizers.

### **5. MUD PROGRAM**

<u>Depth</u>	<u>Type</u>	<u>Wt./ppg.</u>	<u>Vis.</u>	<u>Fluid Loss</u>	<u>PH</u>
0'-200'	FW gel/lime spud mud	8.4-8.7	30-50	NC	10
200'-1800'	FW gel/Polymer	8.3-8.6	30-35	<20cc's	9.5
1800'-4800'	FW gel/Polymer	8.3-8.6	30-35	<20cc's	9.5

Lost circulation and absorption material will be on location.

### **6. CORING, TESTING, & LOGGING**

No cores or drill stem tests are planned. Open hole logs will include GR, Neutron-Density, Caliper, Induction, and SP from TD to the intermediate casing shoe.

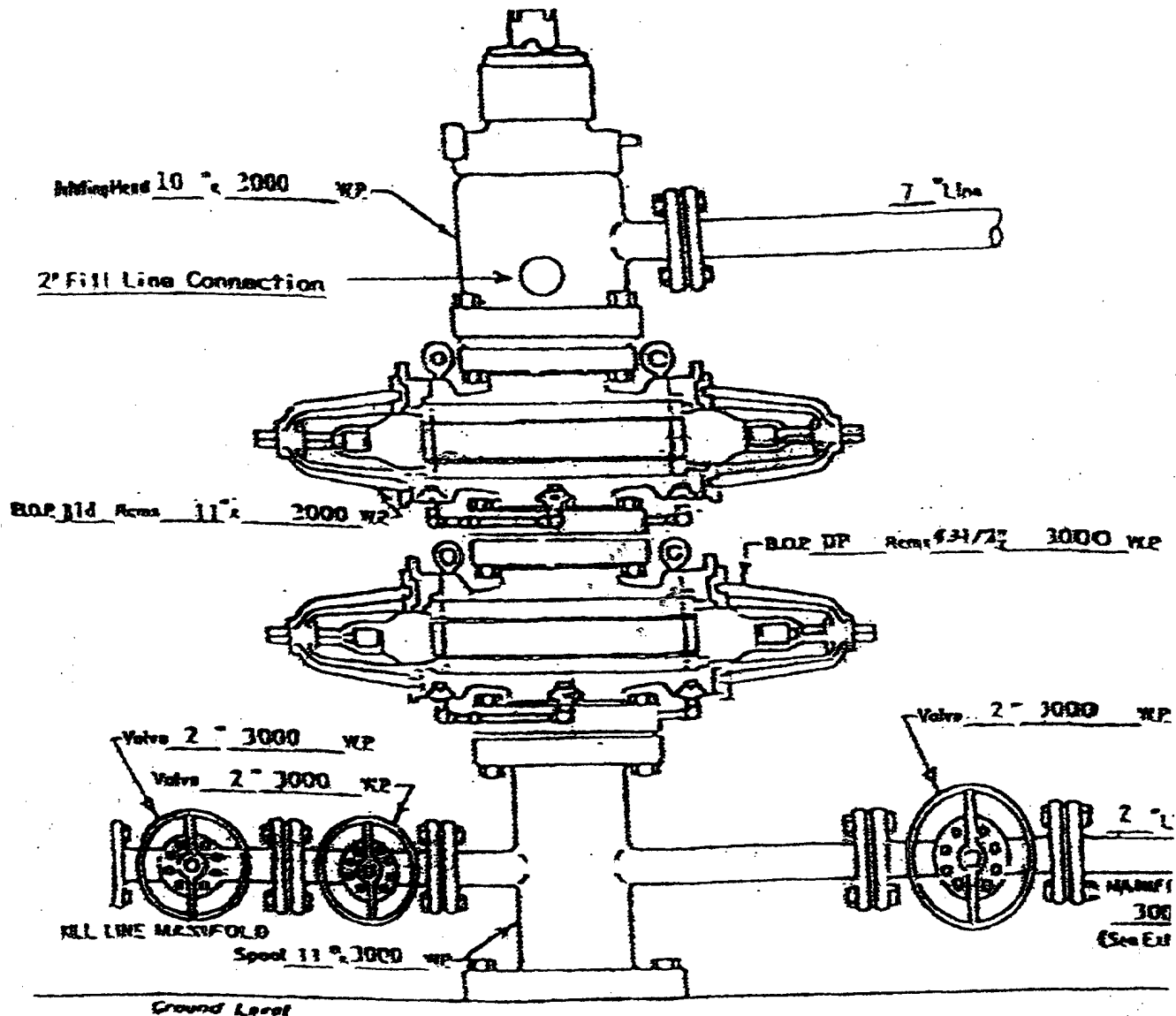
### **7. DOWN HOLE CONDITIONS**

No abnormal pressures, temperatures, nor hydrogen sulfide are expected. Maximum pressure will be ~800 psi.

### **8. OTHER INFORMATION**

The anticipated spud date is June 10 2005. It is expected it will take ~7 days to drill and ~7 days to complete the well. Completion will start about one month after the spud and will include hydraulic fracturing.

M & G DRILLING COMPANY  
SAN JUAN COUNTY, NEW MEXICO



WELL HEAD B.O.P.  
3000 #W.P.

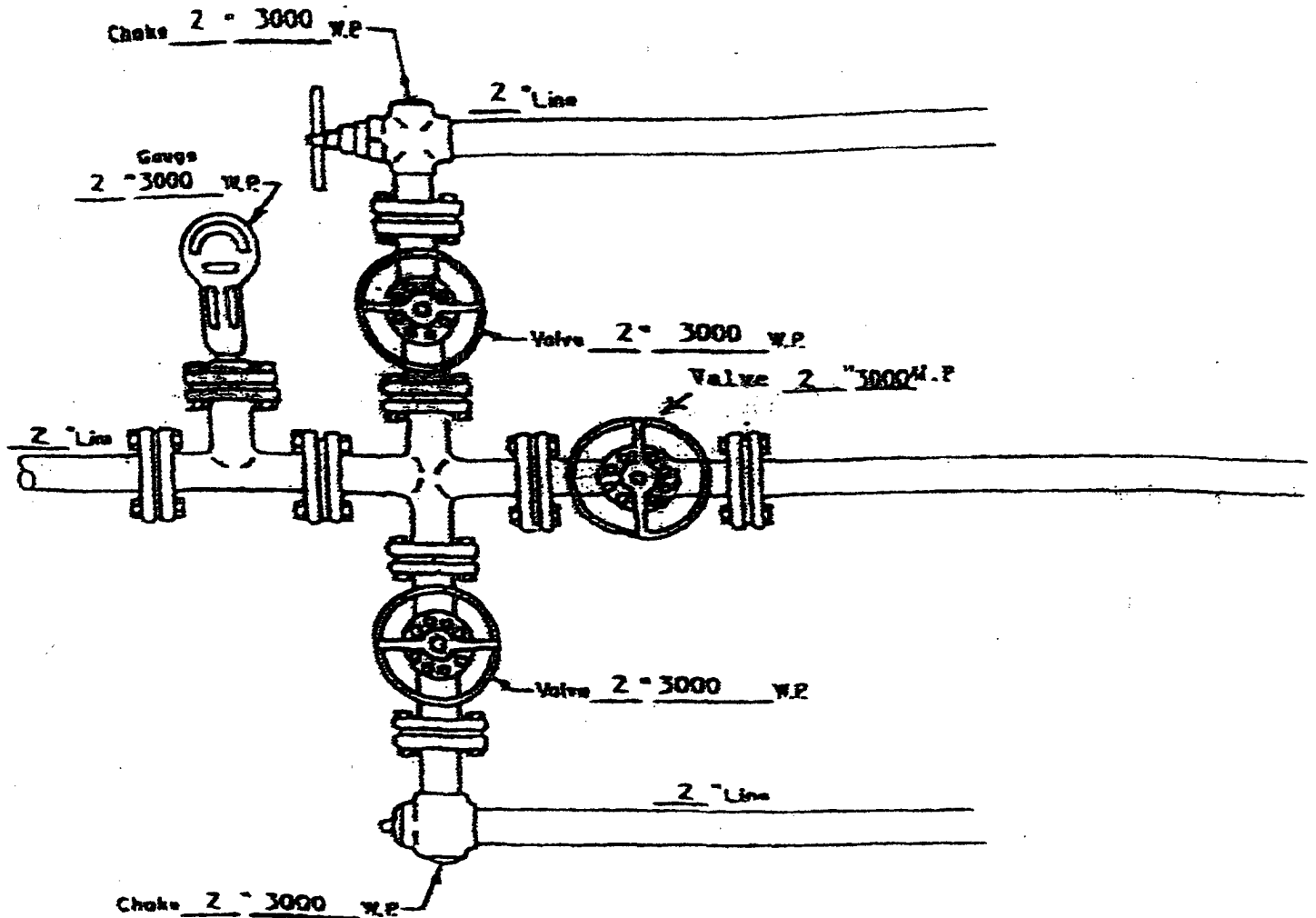
☐ Manual  
☒ Hydraulic

NOTE: Although 3000 psi BOP equipment will be used, equipment determination and line sizing are based on the requirements for 2000 psi BOP equipment due to the known drilling and reservoir conditions.

PAGE #5



M & G DRILLING COMPANY  
SAN JUAN COUNTY, NM



MANIFOLD

3000 #W.P

☒ Manual

☐ Hydraulic

8-5/8" 23# LS X-42 CASING  
0.250" WALL  
CALLAPSE = 1016 PSI  
INTERNAL YIELD = 1040 PSI

ATTACHMENT NO. 2

PAGE #6