

2004 DEC 6 PM 2 33

RECEIVED
070 FARMINGTON NMForm 3160-3
(August 1999)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

1a. Type of Work <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Designation and Serial No. SF-078481A	
1b. Type of Well: <input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other <input type="checkbox"/> Single Zone <input checked="" type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator M&G Drilling Company Inc. NM OGRID # 141852		7. If Unit or CA, Agreement, Name and No.	
3a. Address c/o Mike Pippin LLC 3104 N. Sullivan, Farmington, NM 87401		8. Lease Name and Well No. GRAHAM 10 #7	
3b. Phone Number (505) 327-4573		9. API Well No. 30-045-32728	
4. Location of Well (Footage, Sec. T. R., M. or Survey Description) At surface: Unit B, 790' FNL, 1930' FEL At proposed prod. Zone: Same		10. Field and Pool, or Exploratory BLANCO MESAVERDE & OTERO CHACRA	
14. Distance in miles and direction from nearest town or post office* ~14 Miles South of Blanco, NM		11. Sec., T., R., M., or Blk. and Survey or Area B Sec 10, T-27-N, R-8-W	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. Unit line, if any) 790'	16. No. of Acres in lease 320 Acres E/2 MV 160 NE 1/4 CH	12. County or Parish, <input checked="" type="checkbox"/> San Juan	
18. Distance from proposed* location to nearest well 837'	19. Proposed Depth 4650'	13. State New Mexico	
21. Elevation (Show whether DF, KDB, RT, GL, etc.) 5899' GL	22. Approximate date work will start* June 18, 2005	17. Spacing Unit dedicated to this well 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:

- Well plat certified by a registered surveyor.
- A Drilling Plan
- A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
- Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
- Operator certification.
- 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#	4650'	317 Sxs, 634 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, 38.4 Sec N
Longitude: 107 Deg, 39 Min, 59.6 Sec W

25. Signature <i>Mike Pippin</i>	Name (Printed/Typed) Mike Pippin	Date December 5, 2004
Title Petroleum Engineer		
Approved by (Signature) <i>[Signature]</i>	Name (Printed/Typed) AFU	Date 2-10-05
Title AFU	Office FFO	

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)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

NMOC

DRILLING OPERATIONS AUTHORIZED ARE
SUBJECT TO COMPLIANCE WITH ATTACHED
"GENERAL REQUIREMENTS".

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

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

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

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

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

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

*API Number 30045-32728		*Pool Code 72319	*Pool Name BLANCO MESAVERDE	
*Property Code 33348	*Property Name GRAHAM 10		*Well Number 7	
*OGRD No. 141852	*Operator Name M & G DRILLING COMPANY		*Elevation 5899'	

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	10	27-N	8-W		790	NORTH	1930	EAST	SAN JUAN

¹¹ 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
*Dedicated Acres 320 E/2		*Joint or Infill Y		*Consolidation Code		*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.		N 89-28-16 W FD. 3 1/4" BC. 2632.7' (M) 1955 B.L.M.	
LAT. 36°35'38.4" N. (NAD 83)		1930'	
LONG. 107°39'59.6" W. (NAD 83)			
10		N 02-03-04 E 5398.6' (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 Pippin
Signature

MIKE PIPPIN
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 knowledge and belief.

SEPTEMBER 14, 2004
Date of Survey

[Signature]
Signature and Seal of Professional Surveyor

14831
Certificate Number

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., Artesia, N.M. 87410

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

Form C-102
Revised August 15, 2000

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

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-045-32728	² Pool Code 82329	³ Pool Name OTERO GHAORA
⁴ Property Code 33348	⁵ Property Name GRAHAM 10	⁶ Well Number 7
⁷ OGED No. 141852	⁸ Operator Name M & G DRILLING COMPANY	⁹ Elevation 5899'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
B	10	27-N	8-W		790	NORTH	1930	EAST	SAN JUAN

¹¹ 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
¹² Dedicated Acres 160 NE/4			¹³ Joint or Infill		¹⁴ Consolidation Code		¹⁵ 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.	N 89-28-16 W FD. 3 1/4\" BC. 2632.7' (M) 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. Signature: <u>Mike Pippin</u> Printed Name: <u>MIKE PIPPIN</u> Title: <u>AGENT - PETR. ENGR.</u> Date: <u>12-6-04</u>
	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 knowledge and belief. Date of Survey: <u>SEPTEMBER 12, 2004</u> Signature and Seal of Professional Surveyor:		
	Certificate Number: _____		
	FD. 3 1/4\" BC. 1955 B.L.M.		

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

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

Form C-103

March 4, 2004

WELL API NO.

5. Indicate Type of Lease **Federal**
STATE ☐ FEE ☐

6. State Oil & Gas Lease No.
Federal: SF-078481A

7. Lease Name or Unit Agreement Name
GRAHAM 10

8. Well Number
#7

9. OGRID Number **141852**

10. Pool name or Wildcat
Blanco Mesaverde & Otero Chacra

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 ☐ Gas Well ☒ Other

2. Name of Operator

M & G DRILLING COMPANY

3. Address of Operator c/o Agent, Mike Pippin LLC

3104 N. Sullivan, Farmington, NM 87401 505-327-4573

4. Well Location

Unit Letter **B:** **790** feet from the **North** line and **1930** feet from the **East** line

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

11. Elevation (Show whether DR, RKB, RT, GR, etc.)
5899' GL

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

Pit Location: **UL B 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'-1000'** Below-grade Tank Location **UL** Sect **10** Twp **27N** Rng **8W** ;
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 /Chacra commingled 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

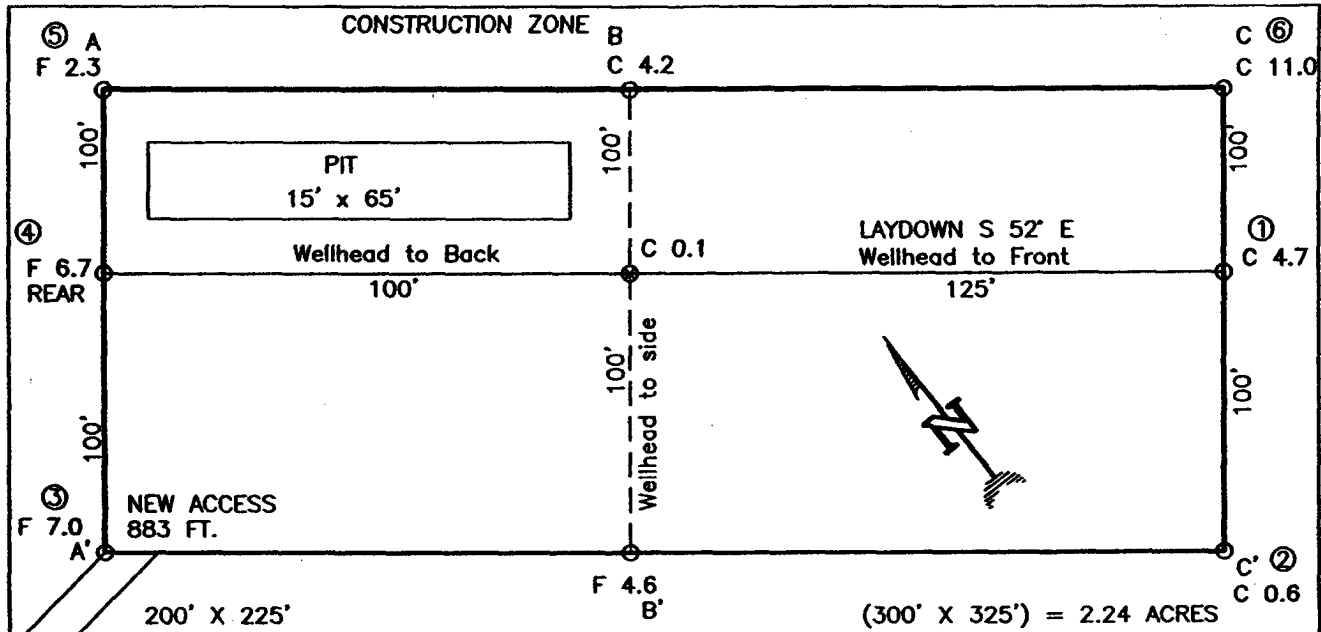
Type or print name Mike Pippin E-mail address: mpippin@ddbroadband.net Telephone No. 505-327-4573

(This space for State use)

APPROVED BY [Signature] TITLE DEPUTY OIL & GAS INSPECTOR, DIST. #1 DATE FEB 14 2005

Conditions of approval, if any:

M & G DRILLING COMPANY
 GRAHAM 10 No. 7, 790 FNL 1930 FEL
 SECTION 10, T27N, R8W, N.M.P.M., SAN JUAN COUNTY, N. M.
 GROUND ELEVATION: 5899, DATE: SEPTEMBER 10, 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

5910				
5900				
5890				
5880				

ELEV. B-B' C/L

5910				
5900				
5890				
5880				

ELEV. C-C' C/L

5910				
5900				
5890				
5880				

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
Daggett Enterprises, Inc. Surveying and Oil Field Services P. O. Box 15088 • Farmington, NM 87401 Phone (505) 336-1772 • Fax (505) 328-4019 NEW MEXICO L.S. No. 14831 DAWGHT ENT. L.L.C. 00001612078 DATE 09/23/04 RAMP MEG017		

M & G DRILLING COMPANY
GRAHAM 10 #7 MV/CHACRA
790' FNL, 1930' FEL
Unit B Sec. 10 T27N R8W
San Juan County, NM

Drilling Program

1. ESTIMATED FORMATION TOPS (KB)

<u>Formation Name</u>	<u>Depth</u>
Nacimeinto	Surface
Ojo Alamo	1178'
Kirtland	1349'
Fruitland	1829'
Pictured Cliffs	2113'
Chacra	3067'
Cliffhouse	3797'
Menefee	3821'
Point Lookout	4377'
TD (4-1/2")	4650'

2. NOTABLE ZONES

Gas or Oil Zones
Fruitland
Pictured Cliffs
Chacra
Cliffhouse
Menefee
Point Lookout

Water Zones
Ojo Alamo
Kirtland

Coal Zone
Fruitland

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.

M & G DRILLING COMPANY
GRAHAM 10 #7 MV/CHACRA
790' FNL, 1930' FEL
Unit B Sec. 10 T27N R8W
San Juan County, NM

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. 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	4650'

Surface Casing will be cemented to the surface with ~125 cu. ft. (~106 sx) Class "B" cmt or equivalent (1.18 ft³/sx yield, 15.6 ppg, & 5.2 gps) with 2% CaCl₂ 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% CaCl₂, 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% CaCl₂, 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 = ~634 cu. ft. (~317sx). 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.

M & G DRILLING COMPANY

GRAHAM 10 #7 MV/CHACRA

790' FNL, 1930' FEL

Unit B Sec. 10 T27N R8W

San Juan County, NM

Lead cement will be ~578 cu. ft. (~277 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.

Tail cement will be ~56 cu. ft. (~40 sx) Class "B" cmt or equivalent w/1% gel, 2% Cacl₂, 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'-4650'	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.

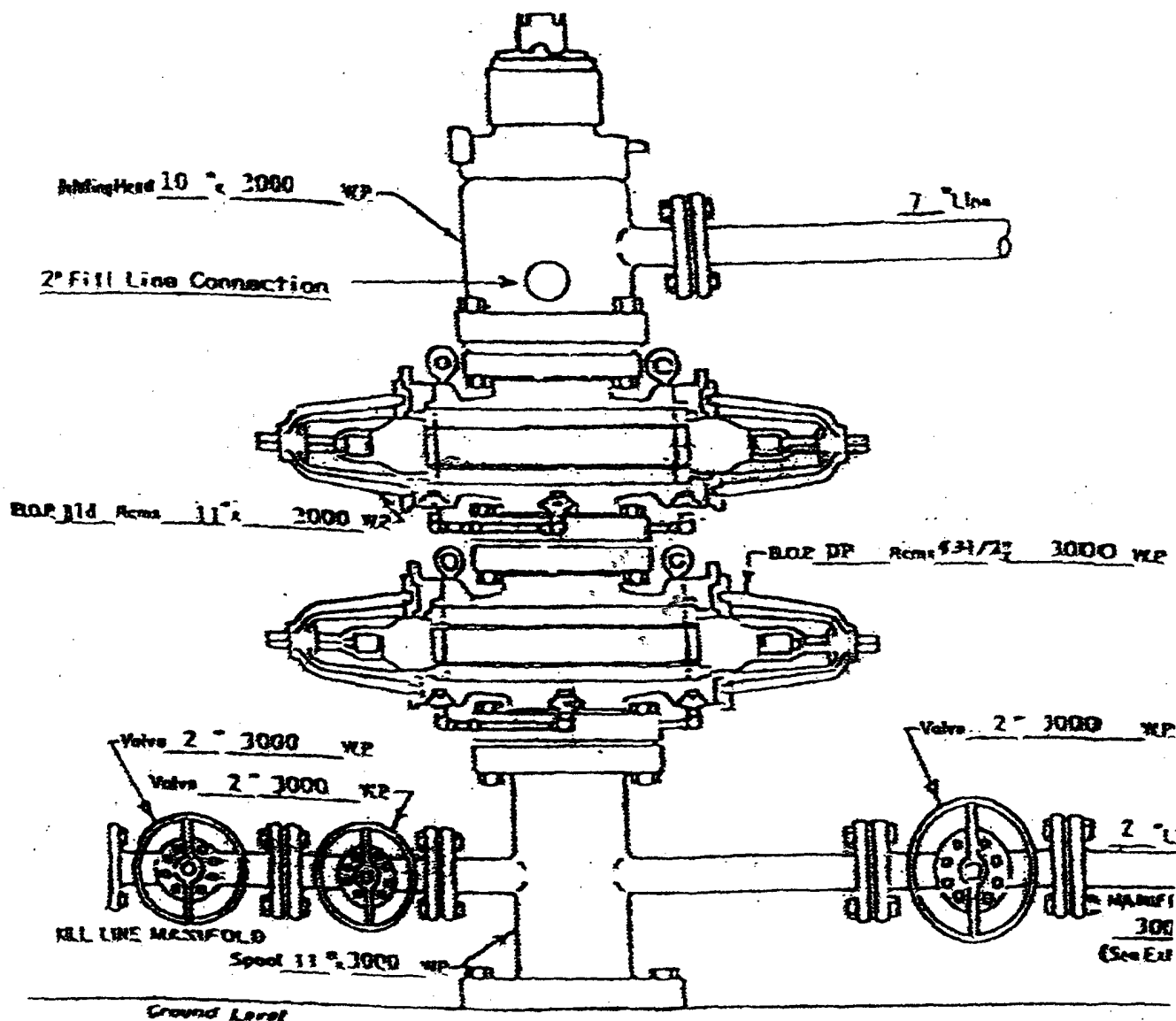
7. DOWN HOLE CONDITIONS

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

8. OTHER INFORMATION

The anticipated spud date is June 18, 2005. It is expected it will take ~8 days to drill and ~10 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



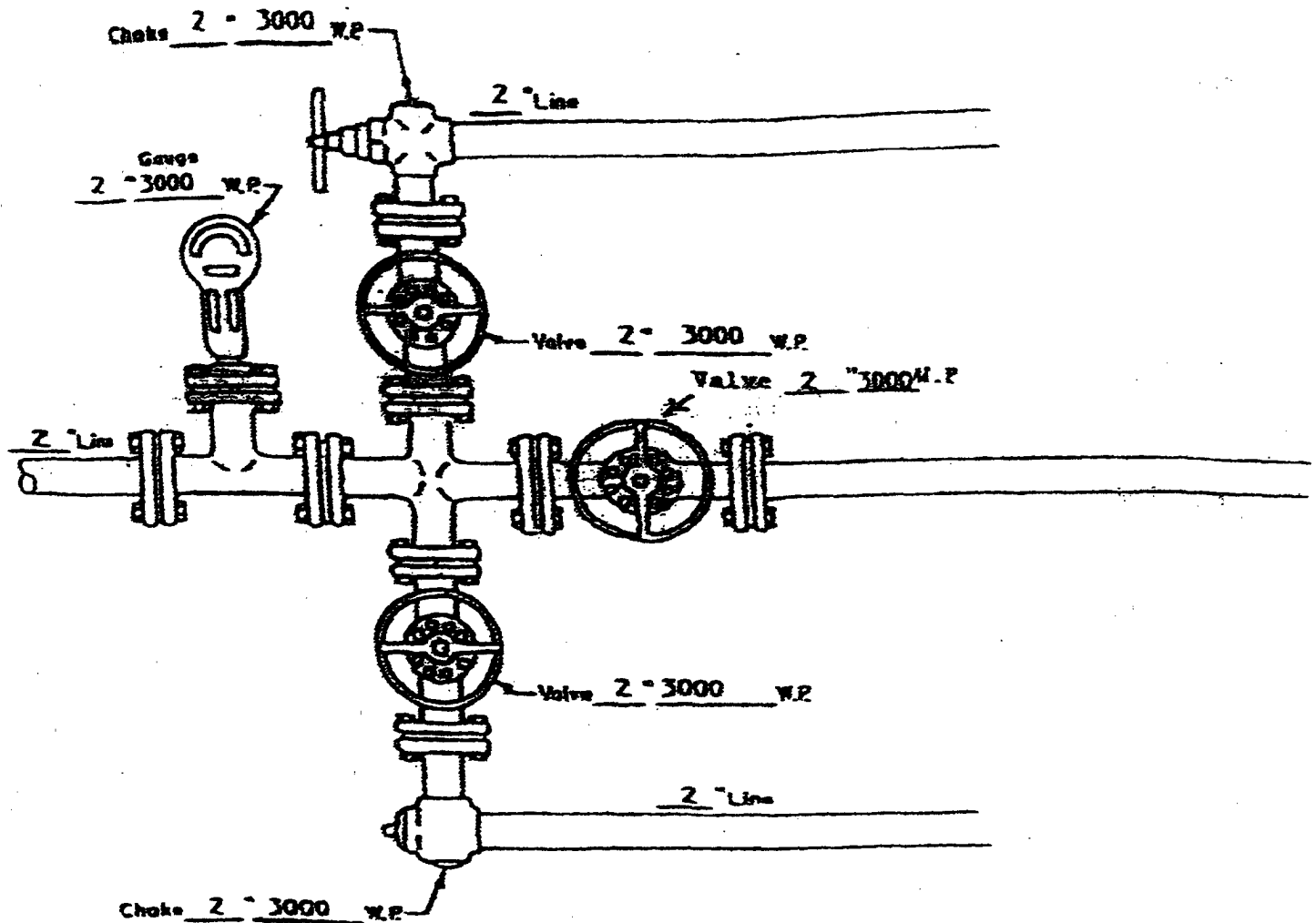
WELL HEAD B.O.P.
3000 #WP

☐ 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