

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 AUG 3 PM 12 30

RECEIVED

070 FARMINGTON NM

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
3104 N. Sullivan, Farmington, NM 87401
3b. Phone Number (505) 327-4573

4. Location of Well (Footage, Sec. T. R., M., or Survey Description)
At surface: Unit L, 1980' FSL, 760' FWL
At proposed prod. Zone: Same

14. Distance in miles and direction from nearest town or post office*
10 Miles Southeast of Farmington, NM

15. Distance from proposed*
location to nearest 760'
property or lease line, ft.
(Also to nearest drlg. Unit line, if any)

18. Distance from proposed*
location to nearest well 991'

21. Elevation (Show whether DF, KDB, RT, GL, etc.)
5792'

16. No of Acres in lease
320

19. Proposed Depth
2000'

22. Approximate date work will start*
December 17, 2004

5. Lease Designation and Serial No.
SF-077710

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.
HARDIE #62s

9. API Well No.
300453250300

10. Field and Pool, or Exploratory
Basin Fruitland Coal

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

Sec 14, T-29-N, R-12-W

12. County or Parish, San Juan
13. State New Mexico

17. Spacing Unit dedicated to this well

320 Acres S/2
330.52

20. BLM/BIA Bond No. on file

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:

- 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" | 8-5/8" LS | 23# | 200' | 140 Sxs, 165 ft3 - 100% Excess |
| 6-1/4" | 4-1/2" K-55 | 10.5# | 2000' | 156 Sxs, 298 ft3 - 45% Excess |

The on-site inspection was on 7/1/04 by Brice Barlan
Archy is by DCA.

EA is by Permits West (no TE necessary)

SEE ATTACHED APD INFORMATION

Latitude: 36 Deg, 43 Min, 29 Sec N
Longitude: 108 Deg, 04 Min, 31 Sec W

| | | |
|---|-------------------------------------|-----------------------|
| 25. Signature <i>Mike Pippin</i> | Name (Printed/Typed) Mike Pippin | Date July 30, 2004 |
| Title Petroleum Engineer | | |
| Approved by (Signature) <i>[Signature]</i> | Name (Printed/Typed) | Date 1-11-05 |
| Title AFM | 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

NMOCD

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

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

DISTRICT IV
2040 South Pacheco, Santa Fe, NM 87505

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

| | | | |
|-----------------------------|---|---------------------|------------------------------------|
| *API Number 30-045-32503 | | *Pool Code 71629 | *Pool Name BASIN FRUITLAND CORL |
| *Property Code 16604 | *Property Name HARDIE | | *Well Number 62S |
| *GRID No. 141852 | *Operator Name M & G DRILLING COMPANY INC. | | *Elevation 5792' |

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 |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| L | 14 | 29-N | 12-W | | 1980 | SOUTH | 760 | WEST | 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 5/2 330.1512 | | *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

| | | | | | | | |
|----------------------------|--|--------|--|--------|--|--------|--|
| LOT 3 | | LOT 4 | | LOT 2 | | LOT 1 | |
| FD. 3 1/4" BC. 1974 BLM | | | | LOT 5 | | LOT 6 | |
| LOT 10 | | LOT 9 | | LOT 8 | | LOT 7 | |
| LOT 11 | | LOT 12 | | LOT 13 | | LOT 14 | |

760'

LAT. = 36°43'29" N. (NAD 83)
LONG. = 108°04'31" W. (NAD 83)

N 00-08-09 E
2640.9' (M)

1980'

FD. 3 1/4" BRASS CAP
1974 BLM

S 88-03-49 E
2712.8' (M)

FD. 3 1/4" BC.
1974 BLM

14

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
7-30-04
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.

JUAN A. VORONICH
Date of Survey
14831
Signature and Seal of Professional Surveyor:
REGISTERED 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

| | | |
|--|--|---|
| 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.) | | WELL API NO. |
| 1. Type of Well: Oil Well <input type="checkbox"/> Gas Well <input checked="" type="checkbox"/> Other | | 5. Indicate Type of Lease Federal STATE <input type="checkbox"/> FEE <input type="checkbox"/> |
| 2. Name of Operator M & G DRILLING COMPANY | | 6. State Oil & Gas Lease No. Federal: SF-077710 |
| 3. Address of Operator c/o Agent, Mike Pippin LLC 3104 N. Sullivan, Farmington, NM 87401 505-327-4573 | | 7. Lease Name or Unit Agreement Name HARDIE |
| 4. Well Location Unit Letter <u>L:</u> <u>1980</u> feet from the <u>South</u> line and <u>760</u> feet from the <u>West</u> line Section <u>14</u> Township <u>29N</u> Range <u>12W</u> NMPM San Juan County | | 8. Well Number #62s |
| 11. Elevation (Show whether DR, RKB, RT, GR, etc.) 5792' GL | | 9. OGRID Number 141852 |
| Pit or Below-grade Tank Application (For pit or below-grade tank closures, a form C-144 must be attached) | | |
| Pit Location: UL <u>L</u> Sect <u>14</u> Twp <u>29N</u> Rng <u>12W</u> Pit type: <u>Drilling</u> Depth to Groundwater <u>>100'</u> Distance from nearest fresh water well <u>>1000'</u> Distance from nearest surface water <u>>1000'</u> Below-grade Tank Location UL <u> </u> Sect <u> </u> Twp <u> </u> Rng <u> </u> ; feet from the <u> </u> line and <u> </u> feet from the <u> </u> 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 FRTC 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 ☐.

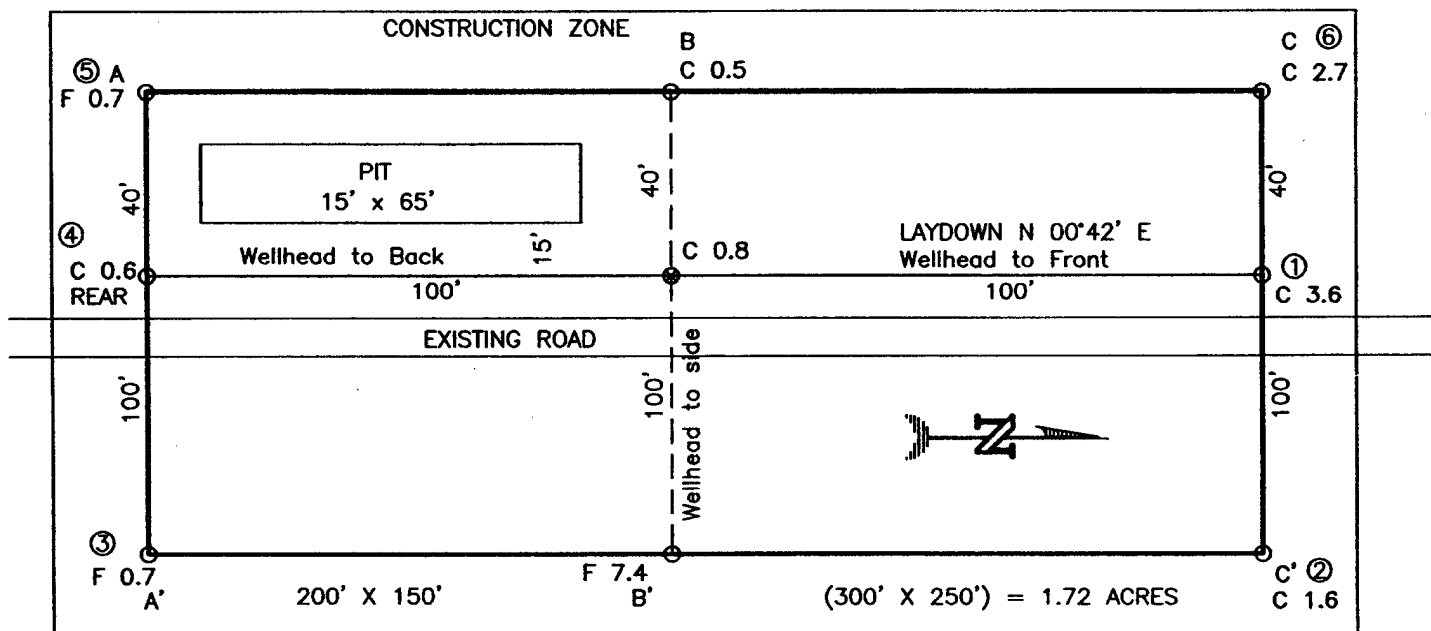
SIGNATURE Mike Pippin TITLE Agent - Petroleum Engineer DATE July 30, 2004

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. 42 DATE JAN 13 2005
Conditions of approval, if any:

M & G DRILLING COMPANY INC.
 HARDIE No. 62S, 1980 FSL 760 FWL
 SECTION 14, T29N, R12W, N.M.P.M., SAN JUAN COUNTY, N. M.
 GROUND ELEVATION: 5792, DATE: JULY 1, 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

| | | | | | |
|------|--|--|--|--|--|
| 5800 | | | | | |
| 5790 | | | | | |
| 5780 | | | | | |
| 5770 | | | | | |

ELEV. B-B'

C/L

| | | | | | |
|------|--|--|--|--|--|
| 5800 | | | | | |
| 5790 | | | | | |
| 5780 | | | | | |
| 5770 | | | | | |

ELEV. C-C'

C/L

| | | | | | |
|------|--|--|--|--|--|
| 5800 | | | | | |
| 5790 | | | | | |
| 5780 | | | | | |
| 5770 | | | | | |

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 # 11

| | | | |
|------------|----------|-------------|----------|
| REVISION | DATE | REVISION BY | DATE |
| RELOCATION | 07/08/04 | A.G. | 08/07/04 |

Daggett Enterprises, Inc.
 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
 DRAWN BY: A.G.
 ROW# M&G005

M & G DRILLING COMPANY
HARDIE #62s FRTC
1980' FSL, 760' FWL
Unit L Sec. 14 T29N R12W
San Juan County, NM

Drilling Program

1. ESTIMATED FORMATION TOPS (KB)

| <u>Formation Name</u> | <u>Depth</u> |
|-----------------------|--------------|
| Ojo Alamo | 481' |
| Kirtland | 631' |
| Fruitland | 1546' |
| Pictured Cliffs | 1841' |
| TD (4-1/2") | 2000' |

2. NOTABLE ZONES

| <u>Gas or Oil Zones</u> | <u>Water Zones</u> | <u>Coal Zone</u> |
|-------------------------|-----------------------|------------------|
| Fruitland | | Fruitland |
| Pictured Cliffs | Ojo Alamo Kirtland | |

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 ~400 psi. The drilling contract has not yet been awarded, thus the exact BOP model to be used is not yet known. A typical 7-1/16" 3,000 psi annular is on PAGE #5.

BOP equipment and all accessories will meet or exceed BLM requirements in 43 CFR Part 3160 for a 3000 psi system. A 3000 psi annular 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 an upper Kelly cock with a handle, 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.

M & G DRILLING COMPANY

HARDIE #62s FRTC

1980' FSL, 760' FWL

Unit L Sec. 14 T29N R12W

San Juan County, NM

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" | 8-5/8" | 23# | LS | New | ST&C | 200' |
| 6-1/4" | 4-1/2" | 10.5# | K-55 | New | ST&C | 2000' |

Surface Casing will be cemented to the surface with ~165 cu. ft. (~140 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.

Production Casing will be cemented to surface with a single stage. Total cement = ~298 cu. ft. (~156sx). 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 ~242 cu. ft. (~116 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'-2000' | 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. No open hole logs will run on this well. We plan to run a cased hole GR-neutron log during completion operations.

M & G DRILLING COMPANY

HARDIE #62s FRTC

1980' FSL, 760' FWL

Unit L Sec. 14 T29N R12W

San Juan County, NM

7. DOWN HOLE CONDITIONS

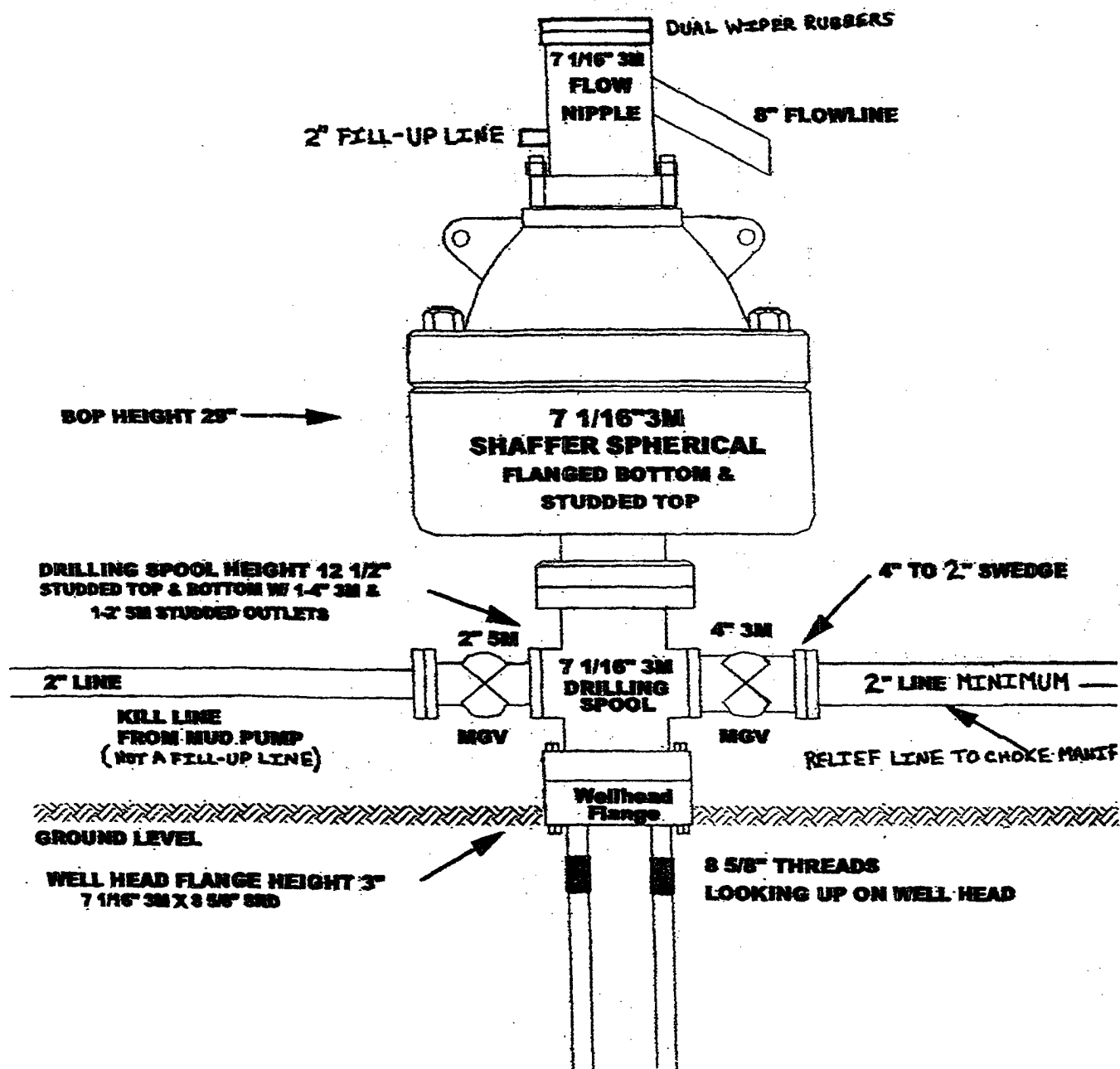
No abnormal pressures, temperatures, nor hydrogen sulfide are expected.
Maximum pressure will be ~400 psi.

8. OTHER INFORMATION

The anticipated spud date is December 17, 2004. 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.

Drilling Rig

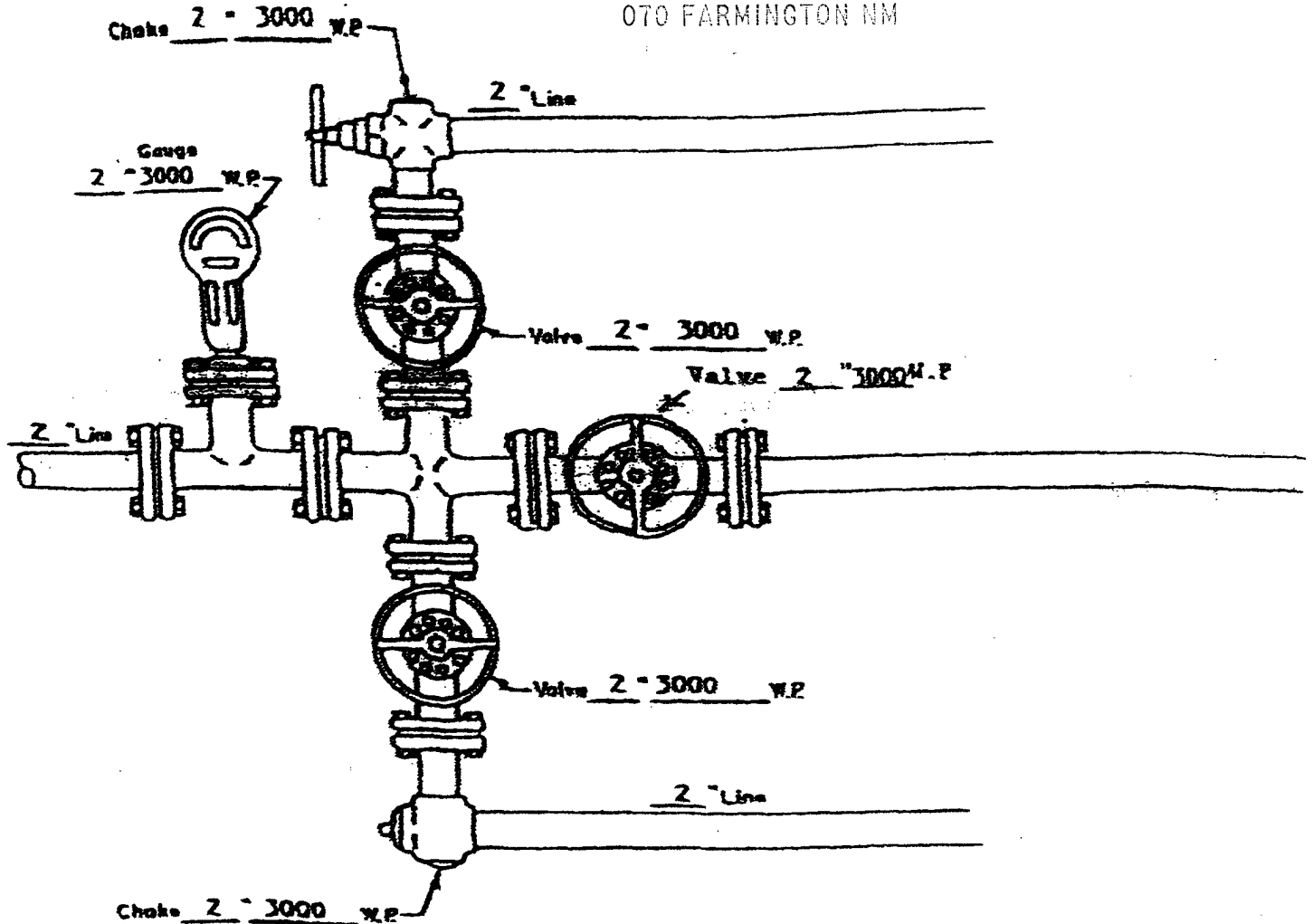
3000 psi BOP System



M & G DRILLING COMPANY
SAN JUAN COUNTY, NM

2004 AUG 5 PM 2 32

RECEIVED
070 FARMINGTON 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