

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

FORM APPROVED

OMB No. 1004-0136

Expires November 30, 2000

2004 JUL 30

5. Lease Designation and Serial No.

NM-078863

6. If Indian, Allottee or Tribe Name

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

8. Lease Name and Well No.

KRAUSE #22s

9. API Well No.

3004532495

10. Field and Pool, or Exploratory  
Basin Fruitland Coal

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

A Sec 32, T-28-N, R-11-W

12. County or Parish,  
San Juan

13. State  
New Mexico

17. Spacing Unit dedicated to this well

320 Acres E/2

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#           | 1900'         | 148 Sxs, 283 ft3 - 45% Excess  |

The on-site inspection was on 6/31/04 by Brice Barlan

Archy is by DCA.

EA & TE are by Permits West.

SEE ATTACHED APD INFORMATION

Latitude: 36 Deg, 37 Min, 21 Sec N  
Longitude: 108 Deg, 01 Min, 20 Sec W

25. Signature

*Mike Pippin*

Name (Printed/Typed)

Mike Pippin

Date

July 29, 2004

Title

Petroleum Engineer

Approved by (Signature)

*June Lovato*  
*Asst. Dir.*

Name (Printed/Typed)

Office

Date

6/13/06

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)

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

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

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

|                             |   |                     |                                    |
|-----------------------------|---|---------------------|------------------------------------|
| *API Number<br>30-045-32495 |   | *Pool Code<br>71629 | *Pool Name<br>BASIN FAULTLAND COAL |
| *Property Code<br>110603    | *Property Name<br>KRAUSE                      |                     | *Well Number<br>22S                |
| *OGRIID No.<br>141852       | *Operator Name<br>M & G DRILLING COMPANY INC. |                     | *Elevation<br>6004'                |

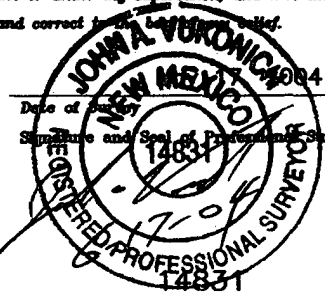
<sup>10</sup> Surface Location

| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County   |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|----------|
| A             | 32      | 28-N     | 11-W  |         | 1295          | NORTH            | 1145          | EAST           | SAN JUAN |

<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 |
|-----------------------------|---------|-----------------------|-------|---------------------|---------------|------------------|---------------|----------------|--------|
|                             |         |                       |       |                     |               |                  |               |                |        |
| *Dedicated Acres<br>320 E/2 |         | *Joint or Infill<br>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<br>SEC. CORNER<br>FD. 2 1/2" BC.<br>1913 U.S.G.L.O. |  | S89°55'02"E<br>5276.6' (M)                                     |  | SEC. CORNER<br>FD. 2 1/2" BC.<br>1913 U.S.G.L.O. |  | 17<br>OPERATOR CERTIFICATION<br>I hereby certify that the information contained herein<br>is true and complete to the best of my knowledge and<br>belief.<br><br>Signature <u>Mike Pippin</u><br>Printed Name <u>MIKE PIPPIN</u><br>Title <u>AGENT-PETR. ENGR.</u><br>Date <u>7-29-04</u>   |  |
|  |  | LAT. = 36°37'21" N. (NAD 83)<br>LONG. = 108°01'20" W. (NAD 83) |  | 1295'<br>1145'                                   |  |   |  |
|  |  |  |  | * KRAUSE #71                                     |  |   |  |
|  |  | 32   |  | 5281.1' (C)                                      |  |   |  |
|  |  |  |  | N 00°03' W                                       |  |   |  |
|  |  |  |  | SEC CORNER<br>CORNER CALC'D<br>POSITION          |  | 18<br>SURVEYOR CERTIFICATION<br>I hereby certify that the well location shown on this plat<br>was plotted from field notes of actual surveys made by<br>me or under my supervision, and that the same is true<br>and correct to the best of my knowledge and belief.<br><br>Date of Survey <u>7-29-04</u><br>Signature and Seal of Professional Surveyor<br><br>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.<br><u>30-045-32495</u>   |
| 5. Indicate Type of Lease <b>Federal</b><br>STATE <input type="checkbox"/> FEE <input type="checkbox"/> |
| 6. State Oil & Gas Lease No.<br><b>Federal: NM-078863</b>   |
| 7. Lease Name or Unit Agreement Name<br><b>KRAUSE</b>   |
| 8. Well Number<br><b>#22s</b>   |
| 9. OGRID Number <b>141852</b>   |
| 10. Pool name or Wildcat<br><b>Basin Fruitland Coal</b>   |

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

Pit Location: UL A Sect 32 Twp 28N Rng 11W 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      Twp      Rng      ;  
     feet from the      line and      feet from the      line

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 A: 1295 feet from the North line and 1145 feet from the East line

Section 32 Township 28N Range 11W NMPM San Juan County

11. Elevation (Show whether DR, RKB, RT, GR, etc.)  
6004' GL

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 ☐.

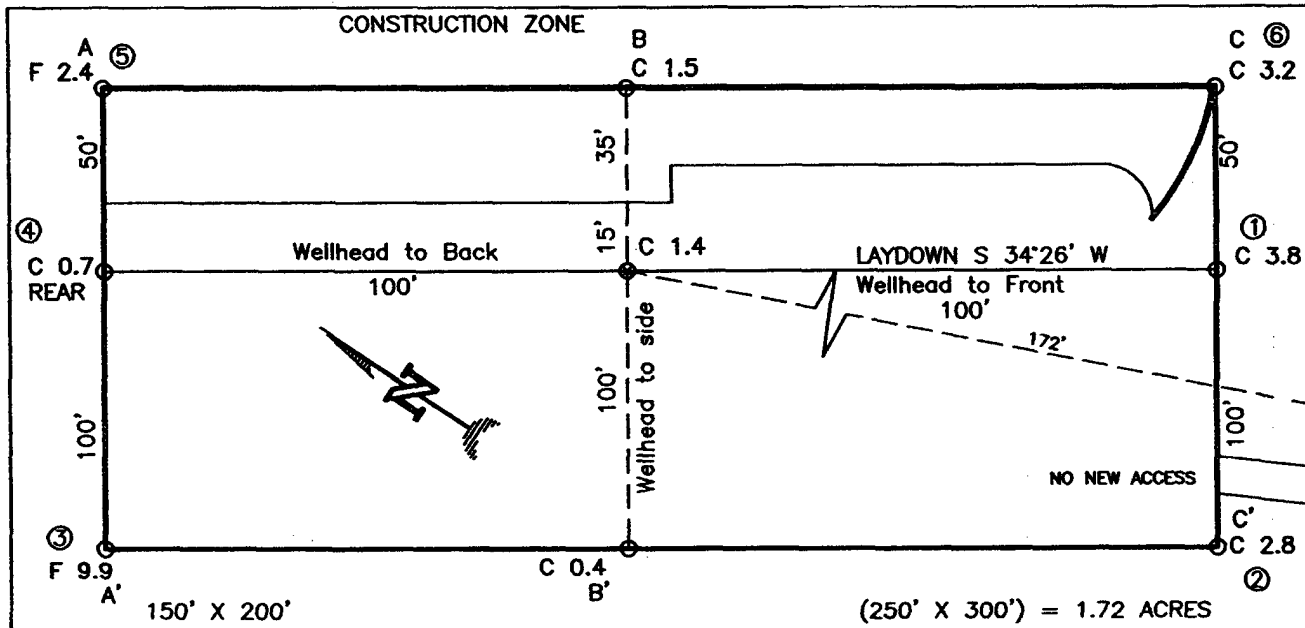
SIGNATURE Mike Pippin TITLE Agent - Petroleum Engineer DATE July 29, 2004

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. IV DATE JUN 15 2006  
Conditions of approval, if any:

M & G DRILLING COMPANY INC.  
 KRAUSE #22S, 1295 FNL 1145 FEL  
 SECTION 32, T28N, R11W, N.M.P.M., SAN JUAN COUNTY, N. M.  
 GROUND ELEVATION: 6004, DATE: May 17, 2004

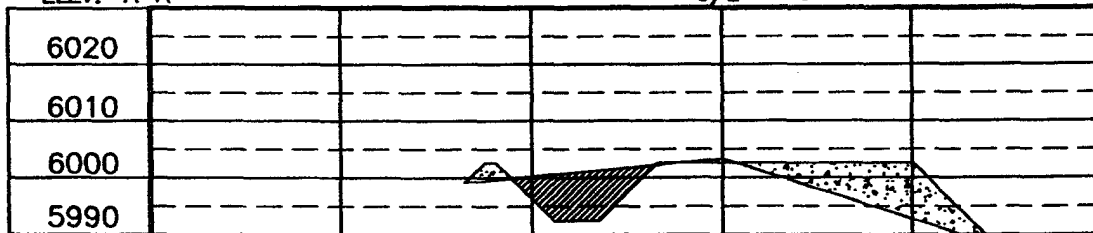


NOTE:

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.

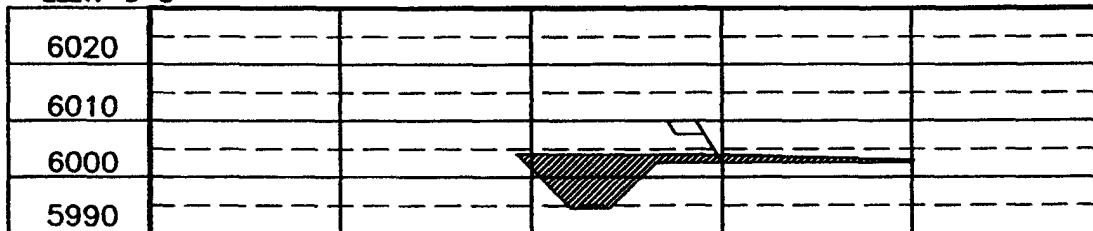
ELEV. A-A'

C/L



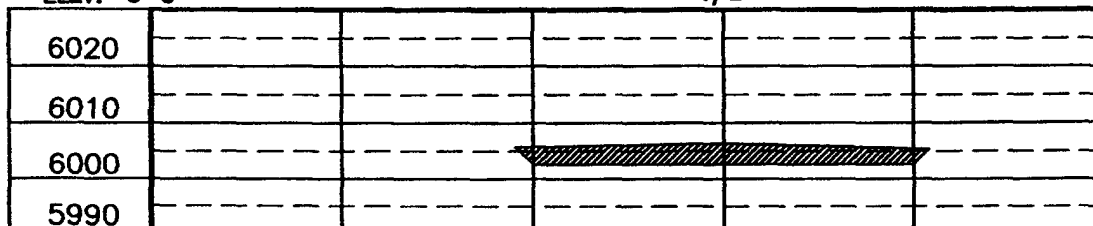
ELEV. B-B'

C/L



ELEV. C-C'

C/L



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

Daggett Enterprises, Inc.

Surveying and Oil Field Services

P. O. Box 15088 • Farmington, NM 87401

Phone (505) 326-1772 • Fax (505) 326-6019

NEW MEXICO L.S. No. 14831

DATE: 05/28/04



DATE: 05/28/04

DATE: 05/28/04

# **M & G DRILLING COMPANY**

**KRAUSE #22s FRTC**

**1295' FNL, 1145' FEL**

**Unit A Sec. 32 T28N R11W**

**San Juan County, NM**

## **Drilling Program**

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

| <u>Formation Name</u> | <u>Depth</u> |
|-----------------------|--------------|
| Ojo Alamo             | 684'         |
| Kirtland              | 777'         |
| Fruitland             | 1559'        |
| Pictured Cliffs       | 1824'        |
| TD (4-1/2")           | 1900'        |

### **2. NOTABLE ZONES**

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

KRAUSE #22s FRTC

1295' FNL, 1145' FEL

Unit A Sec. 32 T28N R11W

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              | 1900'                   |

**Surface Casing** will be cemented to the surface with ~165 cu. ft. (~140 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~~<sub>30</sub> minutes.

**Production Casing** will be cemented to surface with a single stage. Total cement = ~283 cu. ft. (~148sx). 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 ~227 cu. ft. (~108 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% 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'-1900'   | 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**

**KRAUSE #22s FRTC**

**1295' FNL, 1145' FEL**

**Unit A Sec. 32 T28N R11W**

**San Juan County, NM**

**7. DOWN HOLE CONDITIONS**

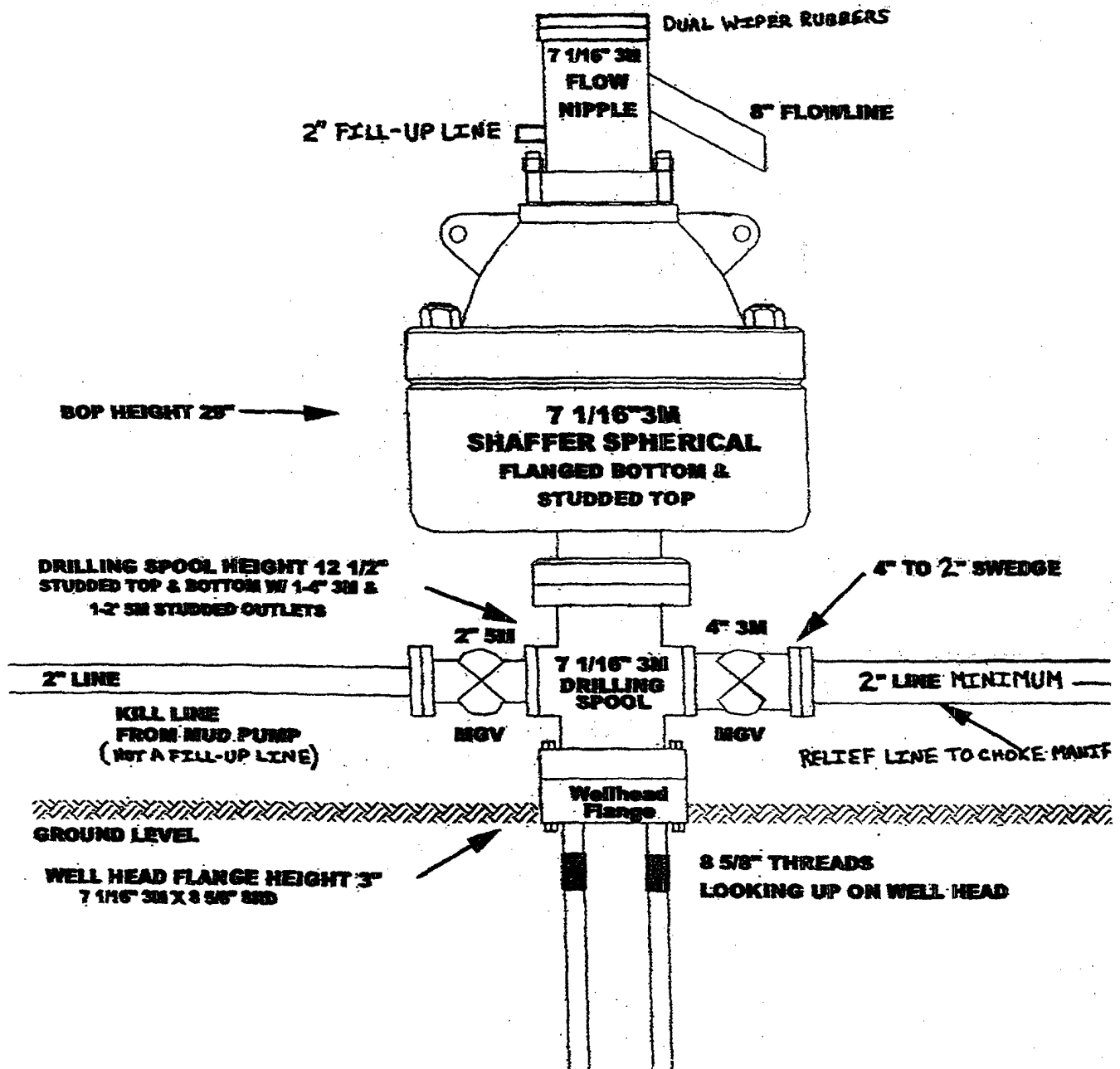
No abnormal pressures, temperatures, nor hydrogen sulfide are expected.  
Maximum pressure will be ~400 psi.

**8. OTHER INFORMATION**

The anticipated spud date is November 26, 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

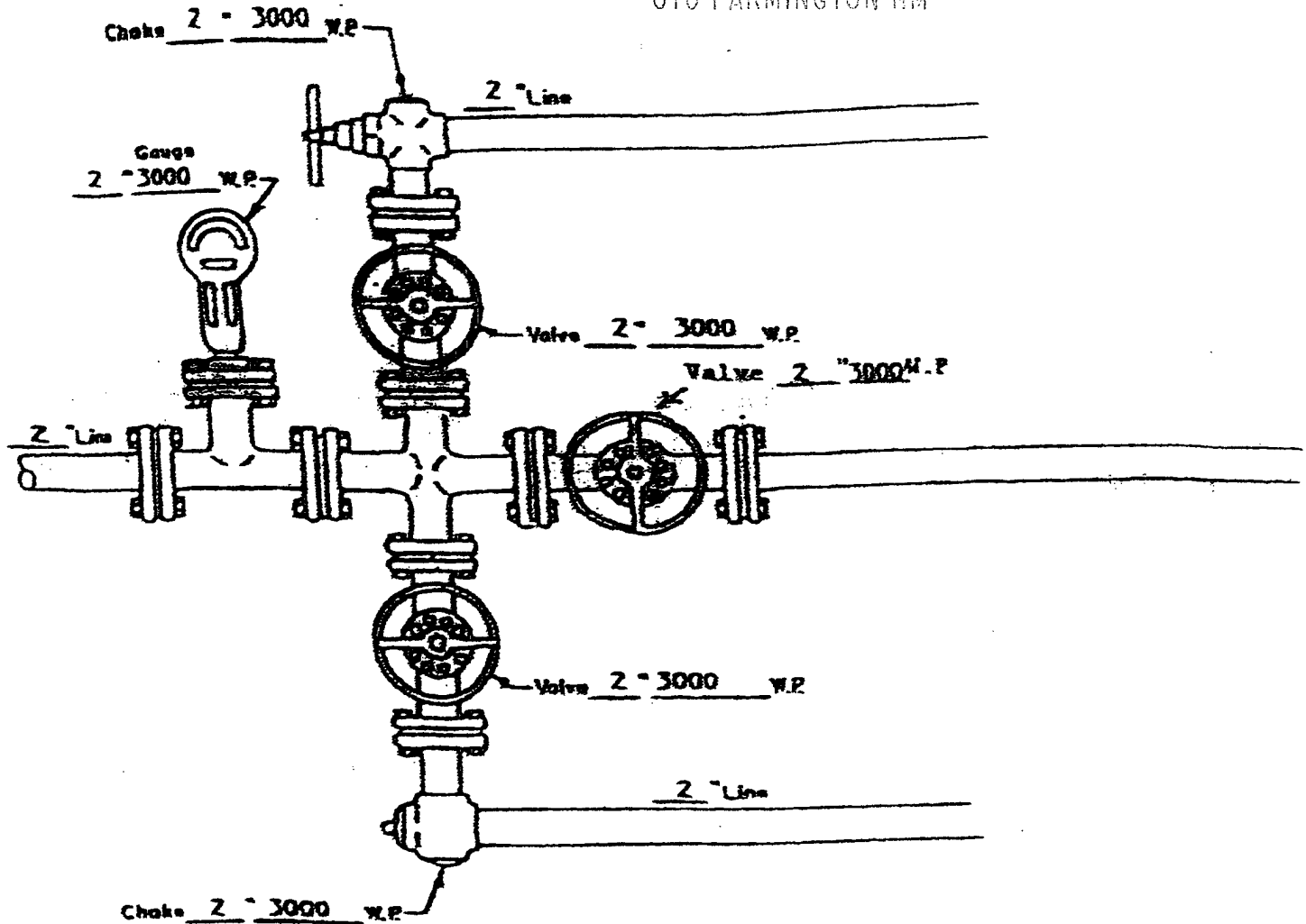




M & G DRILLING COMPANY  
SAN JUAN COUNTY, NM

2004 AUG 5 PM 2 33

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

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or reenter an abandoned well. Use Form 3160-3 (APD) for such proposals.

FORM APPROVED  
OMB No. 1004-0135  
Expires July 31, 1996

5. Lease Serial No.

NMSF-078863

6. If Indian, Allottee or Tribe Name

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

8. Well Name and No.

KRAUSE #22s

9. API Well No.

10. Field and Pool, or Exploratory Area

Basin Fruitland Coal

11. County or Parish, State

San Juan County, New Mexico

SUBMIT IN TRIPLICATE - Other instructions on reverse side

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

M & G Drilling Company Inc. c/o Mike Pippin LLC (Agent)

3a. Address

c/o Pippin, 3104 N. Sullivan, Farmington, NM 87401

3b. Phone No. (include area code)

505-327-4573

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

1295' FNL 1145' FEL (A) Sec. 32 T28N R11W

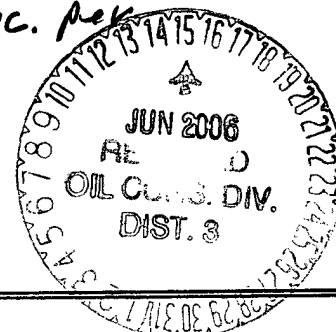
12. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

| TYPE OF SUBMISSION                                   | TYPE OF ACTION  |
|--|---|
| <input checked="" type="checkbox"/> Notice of Intent | <input type="checkbox"/> Acidize <input type="checkbox"/> Deepen <input type="checkbox"/> Production (Start/Resume) <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Subsequent Report           | <input type="checkbox"/> Alter Casing <input type="checkbox"/> Fracture Treat <input type="checkbox"/> Reclamation <input type="checkbox"/> Well Integrity  |
| <input type="checkbox"/> Final Abandonment Notice    | <input type="checkbox"/> Casing Repair <input type="checkbox"/> New Construction <input type="checkbox"/> Recomplete <input type="checkbox"/> Other         |
|  | <input checked="" type="checkbox"/> Change Plans <input type="checkbox"/> Plug and Abandon <input type="checkbox"/> Temporarily Abandon                     |
|  | <input type="checkbox"/> Convert to Injection <input type="checkbox"/> Plug Back <input type="checkbox"/> Water Disposal                                    |

13. Describe Proposed or Completed Operations (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recompleat horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

We plan to test the <sup>BOPF</sup> BOP & surface casing to 500 psi for 30 min during drilling operations as requested by Mike Wade with the BLM.

- Test surface casing prior to drilling out after W.O.C. per NM OGD Rule 107. *ff*



14. I hereby certify that the foregoing is true and correct

Name (Printed/Typed)

Mike Pippin

Title

Petr. Engr. (Agent)

Signature

*Mike Pippin*

Date

January 19, 2005

THIS SPACE FOR FEDERAL OR STATE USE

Approved by

*Jim Lovato*

Title

*Acting ADM*

Date

6/13/06

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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.

(Instructions on reverse)

NMOCD