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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Farmington Field Office
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: ☒ DRILL ☐ REENTER

b. Type of Well: ☐ Oil Well ☒ Gas Well ☐ Other ☒ Single Zone ☐ Multiple Zone

2. Name of Operator

M&G Drilling Company

3A. Address

c/o Walsh Engineering, 7415 E. Main, Farmington, NM 87402

3b. Phone No. (include area code)

(505) 327-4892

4. Location of Well (Report location clearly and in accordance with any State requirements. *)

At surface 660' FNL and 1765' FWL

At proposed prod. Zone

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

13 miles southeast of Blanco, NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)

660'

16. No. of Acres in lease

320 +

17. Spacing Unit dedicated to this well

W/2 320 acres

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.

275'

19. Proposed Depth

2265' +/-

20. BLM/BIA Bond No. on file

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

22. Approximate date work will start*

August 1, 2010

23. Estimated duration

2 weeks

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

24. Attachments

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

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 office.

RCVD AUG 24 '10

OIL CONS. DIV.

DIST. 3

25. Signature

Paul C. Thompson

Name (Printed/Typed)

Paul C. Thompson, P.E.

Date

6/30/2010

Title

Agent

Approved by (Signature)

AFM

Name (Printed/Typed)

Office

FFO

Date

8/13/2010

Application approval 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.

Conditions of approval, if any, are attached.

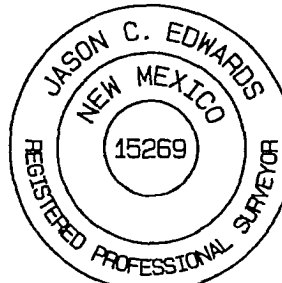
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any Department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Instructions on reverse)

NOTIFY AZED OGD 24 HRS
PRIOR TO CASING & CEMENT

AUG 27 2010 NMOCD

BLM'S APPROVAL OR ACCEPTANCE OF THIS ACTION DOES NOT RELIEVE THE LESSEE AND OPERATOR FROM OBTAINING ANY OTHER AUTHORIZATION REQUIRED FOR OPERATIONS ON FEDERAL AND INDIAN LANDS

<div data-bbox="77 1029 568 1272"><div>15</div><div>660'</div><div>1765'</div><div>LAT: 36.56470 °N LONG: 107.67264 °W DATUM: NAD1983</div></div>	<div data-bbox="568 1029 1073 1272"><div>5176.38'</div><div>Y-260761.0</div><div>Y: 4050061.0</div></div>	<div data-bbox="1073 1029 1529 1272"><div>17 OPERATOR CERTIFICATION</div><div>I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom-hole location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.</div><div>Paul C. Thompson 6/30/10</div><div>Signature Date</div><div>Paul C. Thompson</div><div>Printed Name</div></div>
<div data-bbox="77 1272 568 2019"><div>5427.84'</div><div>LEASE NMNM-03605</div></div>	<div data-bbox="568 1272 1073 2019"><div>22</div><div>5261.52'</div></div>	<div data-bbox="1073 1272 1529 2019"><div>18 SURVEYOR CERTIFICATION</div><div>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</div><div>Date of Survey: MARCH 29, 2010</div><div>Signature and Seal of Professional Surveyor</div><div></div><div>JASON C. EDWARDS</div><div>Certificate Number 15269</div></div>

M&G DRILLING Company
OPERATIONS PLAN
Marron #100

I. Location: 660' FNL & 1765' FWL Date: June 29, 2010
 Sec 22, T27N, R8W
 San Juan County, NM

Field: Basin Fruitland Coal Elev: GL 5959'
Surface: BLM
Minerals: NMNM 03605
API: 30-045-

II. Geology: Surface formation _ San Jose

<u>A. Formation Tops</u>	<u>Depths</u>
Ojo Alamo	1190'
Kirtland	1235'
Fruitland	1890'
Fruitland Coal	1905'
Pictured Cliffs	2115'
Total Depth	2265'

Estimated depths of anticipated water, oil, gas, and other mineral bearing formations which are expected to be encountered:

Water and gas - 1905' and 2115'.

B. Logging Program: Induction/GR and density logs at TD.

C. No over pressured zones are expected in this well. No H₂S zones will be penetrated in this well. Max. BHP = 915 psig.

III. Drilling

A. Contractor:

B. Mud Program:

The surface hole will be drilled with a fresh water mud.

The production hole will be drilled with a fresh water polymer mud. The weighting material will be drill solids or if conditions dictate, barite. The maximum mud weight expected is 8.7 ppg.

C. Minimum Blowout Control Specifications:

Double ram type or annular type 2000 psi working pressure BOP with a rotating head. See the attached exhibits (#1 and #2) for details on the BOP equipment. All ram type preventers and related equipment will be hydraulically tested at nipple-up and after any use under pressure to 1000 psi.

The blind rams will be hydraulically activated and checked for operational readiness each time pipe is pulled out of the hole. All checks of the BOP stack and equipment will be noted on the daily drilling report. The BOP equipment will include a kelly cock, floor safety valve, and choke manifold all rated to 2000 psi.

IV. Materials

A. Casing Program:

Hole Size	Depth	Casing Size	Wt. & Grade
8-3/4"	120'	7"	20# J-55
6-1/4"	2265'	4-1/2"	10.5# J-55

B. Float Equipment:

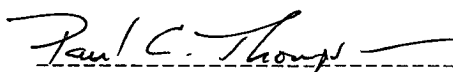
a) Surface Casing: Bell the bottom pin and 3 centralizers on the bottom 3 joints.

b) Production Casing: 4-1/2" cement guide shoe and self fill insert float. Place float one joint above shoe. Five centralizers spaced every other joint above float and five turbolizers every third collar from 1400'.

V. Cementing:

Surface casing: 7" - Use 35 sx (41 cu. ft.) of Type 5 with 2% CaCl_2 and $\frac{1}{4}$ #/sk celloflake (Yield = 1.18 cu. ft./sk; slurry weight = 15.6 PPG). 100% excess to circulate cement to surface. WOC 12 hours. Pressure test surface casing to 1000 psi for 30 min.

Production Casing: 4-1/2" - Before cementing circulate hole with at least 1-1/2 hole volumes of mud. Precede cement with 10 bbls of gel water, followed by 10 bbls of fresh water. **Lead** with 185 sx (381 cu.ft) of Type 5 with 2% sodium metasilicate, 5 #/sk gilsonite, and $\frac{1}{4}$ #/sk. celloflake. (Yield = 2.06 cu.ft./sk; slurry weight = 12.5 PPG). **Tail** with 75 sx (89 cu.ft.) of Type 5 with 5 #/sk gilsonite, and $\frac{1}{4}$ #/sk. celloflake. (Yield = 1.23 cu. ft./sk; slurry weight = 15.6 PPG). Total cement volume is 470 cu.ft. (100% excess to circulate cement to surface).


Paul C. Thompson, P.E.

"2M" BLOWOUT PREVENTER SYSTEM

