N.M. OII COMMI Form 3160-3 UNITED STATES (July 1992) Expires: February 28, 1995 DEPARTMENT OF THE INTERIORSIA MA LEASE DESIGNATION AND SERIAL NO. NM 14124 **BUREAU OF LAND MANAGEMENT** 6. IF INDIAN, ALLOTTES OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL OR DEEPEN 1a. TYPE OF WORK 7. UNIT AGREEMENT NAME DRILL DEEPEN 16. TYPE OF WELL SINGLE MULTIPLE GAS X OIL ZONE ZONE 8. FARM OR LEASE NAME, WELL NO. WELL WELL OTHER 2. NAME OF OPERATOR Marquardt 12 Penn Federal No.2 Gruy Petroleum Management Co. 9. API WELL NO. 3. ADDRESS AND TELEPHONE NO. 30-015-34329 P.O. Box 140907 Irving TX 75014 972-401-3111 10. FIELD AND POOL, OR WILDCA 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.") White City; Penn 11. SEC. T.,R.,M., BLOCK AND SURVEY RECEIVED OR AREA JUL 0 5 2005 2310' FNL & 1330' FEL Section 12-25S-26E Sec. 12 T25S R26E 14, DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE OCU-AFITERIA 12. COUNTY OR PARISH 13. STATE 17 miles South of Carlsbad Eddv NM 16, NO. OF ACRES IN LEASE 17. NO. OF ACRES ASSIGNED 15, DISTANCE FROM PROPOSED\*
LOCATION TO NEAREST TO THIS WELL PROPERTY OR LEASE LINE, T.O. 1330' 640 1280 (Also to nearest drig. unit line, if any) 18. DISTANCE FROM PROPOSED LOCATION® 9. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS TO NEAREST WELL, DRILLING COMPLETED. OR APPLIED FOR, ON THIS LEASE, FT. 13000' 2134' Rotary. 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 22. APPROX. DATE WORK WILL START 3236 'GR 06-30-05 Certabad Controlled Water Besin PROPOSED CASING AND CEMENTING PROGRAM SIZE OF HOLE GRADE, SIZE OF CASING **WEIGHT PER FOOT** SETTING DEPTH QUANTITY OF CEMENT 17-1/2" WITHESS J-55 13 3/8" 200 54.5 # 225 sx circulate 3200 12 1/4" NS-110 9 5/8" 40# 1000 sx circulate 8 3/4" 13000' P-110 5 1/2" 17# 1920 sx TOC 2700'

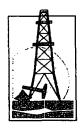
From the base of the surface pipe through the running of production casing, the well will be equipped with a 5000 - psi BOP system. We are requesting a variance for the 13 3/8" surface casing and BOP testing from Onshore Order No. 2, which states all casing strings below the conductor, shall be pressure tested to .22 psi per foot or 1500 # whichever is greater, but not to exceed 70% of the manufactures stated maximum internal yield. During the running of the surface pipe and the drilling of the intermediate hole we do not anticipate any pressures greater than 1000 # and are requesting a variance to test the 13 3/8" casing and BOP system to 1000 # psi, and use rig pumps instead of an independent service company

|                            | and - or operante recent pentante   | P                  | ampo motoda or air maopor   | 140111 001 1100 0 | ompany.             |
|----------------------------|---|--------------------|---|-------------------|---------------------|
|                            | E, DESCRIBE PROPOSED PROGRAM: 1<br>or deepen directionally, give pertinent data on subsur                     |                    | o deepen, give data on present producti<br>and measured and true vertical depths. |                   |                     |
| SIGNED                     | Zono Faris  | TITLE              | Mgr. Ops. Admin   | DATE              | 06-06-05            |
| (This space for Federal or | State office use)   |                    |   |                   |                     |
| PERMIT No.                 |   |                    | APPROVAL DATE   |                   |                     |
| CONDITIONS OF A            | not warrant or certify that the applicant holds legal or equitable title to PPROVAL, IF ANY:  /S/ Joe G. Lara | those rights light | g Harber lease which would entitle the applicant to a LELD MANAGER                |                   | 0 1 200C            |
| APPROVED BY                | /S/ JUE G. Lara   | TITLE .            |   | DATE              | <u> ил О 1 2005</u> |
|                            |   |                    |   | ADDDOW            |                     |

APPHOVAL FOR 1 YEAR 'See instructions On Reverse Side 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

GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED



Gruy Petroleum Management Co.

600 East Las Colinas Blvd. • Suite 1100 • Irving, TX 75039 • (972) 401-3111 • Fax (972) 443-6450

Mailing Address: P.O. Box 140907 • Irving, TX 75014-0907

A wholly-owned subsidiary of Magnum Hunter Resources, Inc., a NYSE company MHR

#### STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Bureau of Land Management 2909 West 2<sup>nd</sup> Street Roswell New Mexico 88201-2019

Attn: Ms. Linda Askwig

Gruy Petroleum Management Co. accepts all applicable terms, conditions, stipulations and restrictions concerning operations conducted on the leased land, or portion thereof, as described below:

Lease No.:

NM - 14124

Legal Description:

All Sec 12, T25S-R26E

Containing 640 acres, Eddy County New Mexico

Formation (S):

Morrow/Pennsylvanian

Bond Coverage:

Nationwide BLM Bond

BLM Bond File No.: NM 2575

Authorized Signature:

Representing Gruy Petroleum Management Co.

Name: Zeno Farris

Title: Manager, Operations Administration

Date: 06/06/05

## **Application to Drill**

Gruy Petroleum Management Co. Marquardt 12 Penn Federal No. 2 Unit Letter G Section 12 T25S - R26E Eddy County, NM

In response to questions asked under Section II B of Bulletin NTL-6 the following information is provided for your consideration:

1 Location:

2310' FNL & 1330' FEL Sec. 1 2 25S 26E

2 Elevation above sea level:

GR 3236'

3 Geologic name of surface formation:

**Quaternery Alluvium Deposits** 

4 Drilling tools and associated equipment:

Conventional rotary drilling rig using fluid as a

circulating medium for solids removal.

5 Proposed drilling depth:

13000'

6 Estimated tops of geological markers:

| T/Salt      | 200' | Cisco Canyon | 9928   |
|-------------|------|--------------|--------|
| B/Salt      | 800' | Strawn       | 10078  |
| Delaware    | 1500 | Atoka        | 10388  |
| Bone Spring | 6168 | Morrow       | 11,158 |
| Wolfcamp    | 8098 | Barnett      | 11,768 |

### 7 Possible mineral bearing formation:

| Strawn | Gas |
|--------|-----|
| Atoka  | Gas |
| Morrow | Gas |

#### 8 Casing program:

| _ | Hole Size | Interval | Casing OD | Weight | Thread | Collar | Grade       |
|---|-----------|----------|-----------|--------|--------|--------|-------------|
| _ | 17 1/2"   | 0-200'   | 13 3/8"   | 54.5   | 8-R    | ST&C   | J-55        |
|   | 12 1/4"   | 0-3200'  | 9 5/8"    | 40     | 8-R    | ST&C   | NS-110      |
|   | 7 7/8"    | 0-13000' | 5 1/2"    | 17     | 8-R    | ST&C   | N-80 / S-95 |

### **Application to Drill**

Gruy Petroleum Management Co. Marquardt 12 Penn Federal No. 2 Unit Letter G Section 12 T25S - R26E Eddy County, NM

#### 9 Cementing & Setting Depth:

| 13 3/8"         | Surface      | Set 200' of 13 3/8" J-55 54.5 ST&C casing. Cement with 225 Sx. Of Class "C" cement + additives, circulate cement to surface.  |
|-----------------|--------------|---|
| 9 5/8"          | Intermediate | Set 3200' of 9 5/8" NS-110 40# ST&C casing or casing sufficient to reach the base of the reef complex. Cement in two stages, first stage cement with 775 Sx. Of Class POZ/C Cement + additives, second stage cement with 225 Sx. Of Class "C" + additives, circulate cement to surface. |
| 5 1 <i>/</i> 2" | Production   | Set 13000' of 5 1/2" NP-80 / S-95 17# ST&C casing. Cement in two stages, first stage cement with 870 Sx. of Class POZ/C Cement + additives. Second stage cement with 1050 Sx of Class "C" Estimated top of cement 2700'.  |

#### 10 Pressure control Equipment:

Exhibit "E". A 13 3/8" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000 # annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000'. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor. BOP unit will be hydraulically operated. BOP will be nippled up on the 9 5/8" casing and will be operated at least once a day while drilling and the blind rams will be operated when out of hole during trips. No abnormal pressure or temperature is expected while drilling.

#### 11 Proposed Mud Circulating System:

| Depth           | Mud Wt     | Viscosity | Fluid Loss     | Type Mud  |
|-----------------|------------|-----------|----------------|---|
| 0 - 200'        | 8.4 - 8.6  | 30 - 32   | May lose circ. | Fresh water spud mud add paper to control seepage and high viscosity sweeps to clean hole.                                      |
| 200' - 3200'    | 9.7 - 10.0 | 28 - 29   | May lose circ  | Brine water. Add paper as needed to control seepage and add lime to control pH (9-10). Use high viscosity sweeps to clean hole. |
| 3200' - 8300'   | 8.4 - 9.9  | 28 - 29   | NC             | Fresh water. Paper for seepage. Lime for pH (9 - 9.5)   |
| 8300' - 10000'  | 8.45 - 8.9 | 28 - 29   | NC             | Cut brine. Caustic for pH control.  |
| 10000' - 13000' | 8.9 - 9.7  | 29 - 45   | NC             | XCD Polymer mud system.   |

Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs. Mud system monitoring equipment with derrick floor indicators and visual/audio alarms shall be installed and operative prior to drilling into the Wolfcamp formation. This equipment will remain in use until production casing is run and cemented.

#### State of New Mexico

DISTRICT I 1625 N. PHENCH DR., HORBS, NW 88240

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

Form C-102

Revised JUNE 10, 2003 Submit to Appropriate District Office

State Lease - 4 Copies Fee Lease - 3 Copies

#### DISTRICT II 1301 W. GEAND AVENUE, ARTESIA, NW 68210

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505

DISTRICT IV WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

| API Number          | 87280 | White City; Fenn (Gas)          |                 |
|---------------------|-------|---------------------------------|-----------------|
| Property Code       |       | roperty Name<br>12 PENN FEDERAL | Well Number     |
| OGRID No.<br>162683 |       | perator Name MANAGEMENT COMPANY | Elevation 3236' |

### Surface Location

| UL or lot No. | Section | Township | Range | Lot idn | Feet from the | North/South line | Feet from the | Kast/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| G             | 12      | 25-S     | 26-E  | İ       | 2310          | NORTH            | 1330          | EAST           | EDDY   |

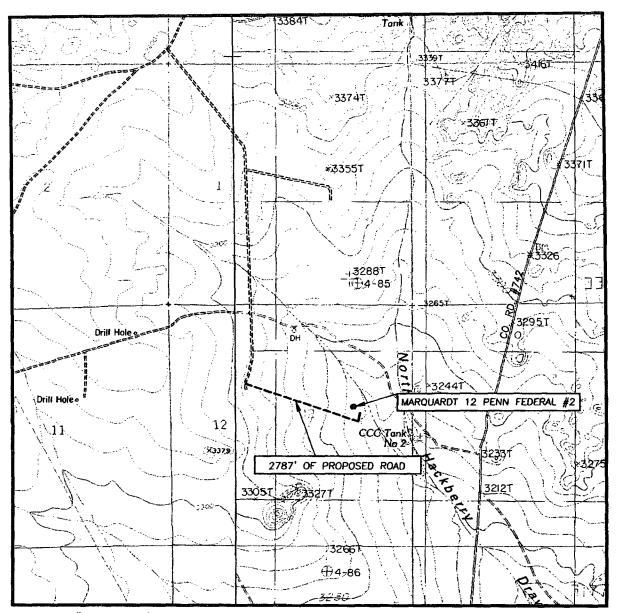
#### Bottom Hole Location If Different From Surface

| UL or lot No.   | Section To  | ownship    | Range         | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|-----------------|-------------|------------|---------------|---------|---------------|------------------|---------------|----------------|--------|
| Dedicated Acres | Joint or fr | Infill Cor | nsolidation ( | ode Oro | ler No.       |                  |               | <u> </u>       |        |

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

|   | AS BEEN APPROVED BY THE DIVISION  |
|---|---|
|   | OPERATOR CERTIFICATION  I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.  |
|   | Signature Zeno Farris   |
|   | Printed Name Mgr Operations Achili Title June 7, 2005 Date  |
| 1.}   | SURVEYOR CERTIFICATION  41.7 3227.3  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 supervison, and that the same is true and |
| GEODETIC COORDINATES  | Marquardt 12 Perin  Fee! #1  Correct to the best of my belief.  MAY 12, 2005  Date Surveyed.  Signature & Seat of D. Surveyed.  Professional Surveyor.  |
| NAD 27 NME  Y=416591.7 N X=528339.3 E  LAT.=32*08'43.06" N  LONG.=104*14'30.37" W | 1760'   |

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

SEC. <u>12</u> TWP. <u>25-S</u> RGE. <u>26-E</u>

SURVEY N.M.P.M.

COUNTY\_\_\_\_EDDY

DESCRIPTION 2310' FNL & 1330' FEL

**ELEVATION\_** 3236'

GRUY PETROLEUM OPERATOR MANAGEMENT COMPANY

LEASE MARQUARDT 12 PENN FEDERAL Exhibit C

U.S.G.S. TOPOGRAPHIC MAP

BOND DRAW, N.M.

CONTOUR INTERVAL:

BOND DRAW, N.M. - 10'

BLACK RIVER VILLAGE, N.M. - 20'



PROVIDING SURVEYING SERVICES SINCE 1948 JOHN WEST SURVEYING COMPANY 412 N. DAL PASO HOBBS, N.M. 88240 (505) 393-3117

## N.M. Oil Cons. DIV-Dist. 2

Form 3160-5 (November 1994)

## uniteh 30x tely. Grand Avenue

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

| (November 1994)  | DEPARTMENT OF THE I   | NTERIOR   | 10010 MECEIV              | d                    | Expires July 31, 1996          |
|--|---|---|---------------------------|----------------------|--------------------------------|
| CIMO   | BUREAU OF LAND  | -   | 004 (V                    | 5. Lease Seri        |                                |
| Do not use t   | RY NOTICES AND REPO<br>this form for proposals to<br>vell. Use Form 3160-3 (API | drill or to re-ent                              | er an OUU-Amir            |                      |                                |
| SUBMIT IN TI   | RIPLICATE - Other Instru  | uctions on reve                                 | rse side                  | 7. If Unit or        | CA/Agreement, Name and/or No.  |
| 1. Type of Well Oil Well  Gas Well   | Plan  |   |                           |                      |                                |
| 2. Name of Operator  | Uther Other   |   |                           | 8. Well Nam Marquard | t 12 Penn Federal No. 2        |
| Gruy Petroleum Manage  | ment Co.  |   |                           | 9. API Well          |                                |
| 3a. Address<br>P. O. Box 140907 Irving   | g, TX 75014-0907  | 3b. Phone No. (in 972-401-                      |                           | 30-015-3             | 4329 Pool, or Exploratory Area |
| 4. Location of Well (Footage, Se   | c., T., R., M., or Survey Description   | 1)  |                           | White Ci             | ty; Penn (87280)               |
| Sec 12-T25S-R26E   |   |   |                           | 11. County of        |                                |
| 2310' FNL & 1330' FEL  |   |   |                           | Eddy Co              | ., NM                          |
| 12. CHECK A  | PPROPRIATE BOX(ES) TO   | O INDICATE NA                                   | TURE OF NOTICE,           | REPORT, OR           | OTHER DATA                     |
| TYPE OF SUBMISSION   |   |   | TYPE OF ACTION            |                      |                                |
| Notice of Intent   | Acidize   | Deepen Deepen                                   | Production (St            |                      | Water Shut-Off                 |
| Subsequent Report  | Alter Casing Casing Repair  | Fracture Treat                                  | Reclamation On Recomplete |                      | Well Integrity Other           |
|  | Casing Repair Change Plans  | New Constructi Plug and Aband                   |                           |                      | Utger                          |
| ☐ Final Abandonment Notice   | Convert to Injection  | Plug Back                                       | Water Dispose             |                      |                                |
| Gruy is altering casing des Intermediate: Set 2700' of   | •   | g.  |                           |                      |                                |
| Production: Set 13000' of  | 17# 5-1/2" P-110 LTC casin  | ıg.   |                           |                      |                                |
|  |   |   |                           |                      |                                |
|  |   |   |                           |                      |                                |
|  |   |   |                           |                      |                                |
| 14. I hereby certify that the foregoing  | ne is true and correct  |   |                           |                      |                                |
| Name (Printed/Typed)   |   | Title   |                           |                      |                                |
| Natalie Krueger Signature,   | 1 1   | Date  | egulatory Technician      |                      |                                |
| Watah  | e Kruege  | <u> </u>  | September 19, 2005        |                      |                                |
|  |   |   | R STATE OFFICE US         |                      |                                |
| Approved by (ORIG. SG  | D.) ALEXIS C. SWOBODA   |   | PETROLEUM I               | ENGINEER             | * SEP 2 2 2005                 |
| Conditions of approval, if any, are certify that the applicant holds lega which would entitle the applicant to | d or equitable title to those right   | e does not warrant or<br>s in the subject lease | 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.

Form 3160-5 (November 1994)

Subsequent Report

Final Abandonment Notice

## N.M. Oil Cons. DIV-Dist. 2

DEPARTMENT OF THE INTERIOR W. Grand Avenue

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

BUREAU OF LAND MANAGEMENT

SUNDRY NOTICES AND REPORTS ON WELL'S

Alter Casing

Casing Repair

Change Plans

Convert to Injection

Lease Serial No. NMNM14124

|                  | Do not use ti<br>abandoned w   | 6. If Indian, Allottee or Tribe Name   |                                |  |
|------------------|--------------------------------|--|--------------------------------|--|
|                  | SUBMIT IN TR                   | 7. If Unit or CA/Agreement, Name and/or No.  |                                |  |
| 1.               | Type of Well                   | <u>ale de la composició d</u> | OCT 2 1 2005                   |  |
| <u></u>          | Name of Operator               | Other  | - OCU-MATE                     | 8. Well Name and No. Marquardt 12 Penn Federal No. 2 |
| 2.               | Gruy Petroleum Manager         | nent Co.   | 9. API Well No.                |  |
| 3a.              | Address                        |  |                                | 30-015-34329   |
|                  | P. O. Box 140907 Irving        | , TX 75014-0907  | 972-401-3111                   | 10. Field and Pool, or Exploratory Area              |
| 4.               | Location of Well (Footage, Sec | ., T., R., M., or Survey De  | scription)                     | White City; Penn (87280)                             |
|                  | Sec 12-T25S-R26E               |  |                                | 11. County or Parish, State                          |
|                  | 2310' FNL & 1330' FEL          |  |                                | Eddy Co., NM   |
|                  | 12. CHECK AF                   | PROPRIATE BOX  | (ES) TO INDICATE NATURE OF NOT | ICE, REPORT, OR OTHER DATA                           |
|                  | TYPE OF SUBMISSION             |  | TYPE OF ACTIO                  | NC   |
| Notice of Intent |                                |  |                                | on (Start/Resume)                                    |

13. Describe Proposed or Completed Operation (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 recomplete 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.)

Fracture Treat

**New Construction** 

Plug and Abandon

Reclamation

Recomplete

Water Disposal

☐ Temporarily Abandon

Spudded 17-1/2" hole at 6am. Ran 5 jts 13-3/8" 54.5# J-55 STC casing to 217'. Cemented with 230sx Class C and circulated 38sx to pit. WOC 12.25 hrs. Tested casing to 1200psi for 15 minutes.

Plug Back

- In 12-1/4" hole, ran 63jts 9-5/8" 40# J-55 LTC casing to 2705'. Cemented with lead of 625sx Interfill C + 1/4# Flocele and 09-26-05 tail of 200sx Premium Plus + 1% CaCl. Circulated 165sx to pit. WOC 13.75 hours.
- 09-27-05 Tested casing to 1500psi for 15 minutes.

ACCEPTED FOR RECORD OCT 1 9 2005 ALEXIS C. SWOBODA PETROLEUM ENGINEER

Well Integrity

Other Set surface &

intermediate casing

| 14. I hereby certify that the foregoing is true and correct Name (Printed/Typed)  | Title                   |      |  |
|---|-------------------------|------|--|
| Natalie Krueger   | Regulatory Technician   |      |  |
| Signature<br>Datalis Kruege   | Date<br>10-11-05        |      |  |
| THIS SPACE FOR  | FEDERAL OR STATE OFFICE | JSE  |  |
| Approved by   | Title                   | Date |  |
| Conditions of approval, if any, are attached. Approval of this notice doc<br>certify that the applicant holds legal or equitable title to those rights in<br>which would entitle the applicant to conduct operations thereon. |                         |      |  |

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.