

**UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT**

**N.M. Oil Cons. DIV-Dist. 2**  
**1301 W. C**  
**Artesia, NM 88210**  
(Other instructions on reverse side)

FORM APPROVED  
OMB NO. 1004-0136  
Expires: February 28, 1995

**APPLICATION FOR PERMIT TO DRILL OR DEEPEN**

1a. TYPE OF WORK  
DRILL ☒ DEEPEN ☐

1b. TYPE OF WELL  
OIL ☐ GAS ☒ SINGLE ☒ MULTIPLE ☐  
WELL WELL OTHER ZONE ZONE

2. NAME OF OPERATOR **CIMAREX ENERGY CO OF COLORADO**  
**Gray Petroleum Management Co.**

3. ADDRESS AND TELEPHONE NO.  
P.O. Box 140907 Irving TX 75014 972-401-3111

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)  
**580' FNL & 460' FEL Sec. 24-17S-29E**

5. LEASE DESIGNATION AND SERIAL NO.  
**LC 028784-A**

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME  
**Grayburg Deep Unit**

8. FARM OR LEASE NAME, WELL NO.  
**Grayburg Deep Unit No. 18**

9. API WELL NO.  
**30-015-34905**

10. FIELD AND POOL, OR WILDCAT  
**Sand Tank: Morrow**

11. SEC. T., R., M., BLOCK AND SUBWAY  
OR AREA  
**Sec. 24 T17S R29E**

12. COUNTY OR PARISH  
**Eddy**

13. STATE  
**NM**

15. DISTANCE FROM PROPOSED LOCATION TO NEAREST PROPERTY OR LEASE LINE, T.O. (Also to nearest drlg. unit line, if any)  
**460'**

16. NO. OF ACRES IN LEASE  
**320**

17. NO. OF ACRES ASSIGNED TO THIS WELL  
**E/2 320**

18. DISTANCE FROM PROPOSED LOCATION TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.  
**N/A**

19. PROPOSED DEPTH  
**12500'**

20. ROTARY OR CABLE TOOLS  
**Rotary**

21. ELEVATIONS (Show whether DF, RT, GR, etc.)  
**3614' GR**

22. APPROX. DATE WORK WILL START\*  
**06-15-05**

**RECEIVED**  
**MAY 31 2005**  
**DOB-ARTESIA**

| PROPOSED CASING AND CEMENTING PROGRAM |                       |                 |                              |                    |
|---------------------------------------|-----------------------|-----------------|------------------------------|--------------------|
| SIZE OF HOLE                          | GRADE, SIZE OF CASING | WEIGHT PER FOOT | SETTING DEPTH                | QUANTITY OF CEMENT |
| 17-1/2"                               | J-55 13 3/8"          | 54.5 #          | 350' - 500' * <b>WITNESS</b> | 490 sx circulate   |
| 12-1/4"                               | P-110/N-80 9 5/8"     | 40 #            | 4000'                        | 1200 sx circulate  |
| 7-7/8"                                | P-110 5 1/2"          | 17 #            | 12500'                       | 1620 sx TOC 2700'  |

\*Set surface casing 25' into the top of the Rustler, which is estimated to be between 350' and 500'.

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 manufacturer's 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 we 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.

IN ABOVE SPACE, DESCRIBE PROPOSED PROGRAM: If proposal is to deepen, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

SIGNED **Zeno Farris** TITLE **Mgr. Ops. Admin** DATE **04-20-05**

(This space for Federal or State office use)

PERMIT No. \_\_\_\_\_ APPROVAL DATE \_\_\_\_\_

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:

APPROVED BY **/s/ James Stovall** TITLE **FIELD MANAGER** DATE **MAY 26 2005**

\*See Instructions On Reverse Side

**APPROVAL FOR 1 YEAR**  
The 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.  
**GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED**  
**Reswell Controlled Water Basin**

29.5 sat

DISTRICT I  
1626 N. FRENCH DR., HOBBS, NM 80240

State of New Mexico  
Energy, Minerals and Natural Resources Department

DISTRICT II  
1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

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

Form C-102  
Revised JUNE 10, 2003  
Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

DISTRICT IV  
1220 S. ST. FRANCIS DR., SANTA FE, NM 87505

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

|                     |   |                                |
|---------------------|---|--------------------------------|
| API Number          | Pool Code<br>84872                                | Pool Name<br>Sand Tank; Morrow |
| Property Code       | Property Name<br>GRAYBURG DEEP UNIT               | Well Number<br>18              |
| OGRID No.<br>162683 | Operator Name<br>GRUY PETROLEUM MANAGMENT COMPANY | Elevation<br>3613'             |

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             | 24      | 17-S     | 29-E  |         | 690           | NORTH            | 950           | EAST           | EDDY   |

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 | Joint or Infill<br>Y | Consolidation Code<br>U | 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

|  |  |
|--|--|
| <p>Grayburg Deep Unit #18</p> <p>GEODETIC COORDINATES<br/>NAD 27 NME<br/>Y=664084.9 N<br/>X=595560.8 E<br/>LAT.=32°49'30.97" N<br/>LONG.=104°01'20.10" W</p> <p>LC-028784-A</p> <p>Grayburg Deep Unit #16</p> <p>1330'</p> <p>855'</p> | <p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Zeno Farris</i></p> <p>Signature<br/>Zeno Farris</p> <p>Printed Name<br/>Mgr Operations Admin</p> <p>Title<br/>January 9, 2006</p> <p>Date</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>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.</p> <p>DECEMBER 23, 2005</p> <p>Date Surveyed<br/>LA</p> <p>Signature &amp; Seal of Professional Surveyor<br/><i>Ronald J. Edson</i> 01/04/06<br/>05.11.1878</p> <p>Certificate No. RONALD J. EDSON 3239<br/>GARY EDSON 12641</p> |
|--|--|



## 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 subsidiary of Magnum Hunter Resources, Inc. • A NYSE Listed Company • "MHR"*

June 22, 2005

Oil Conservation Division  
District II Office  
1301 W. Grand Ave.  
Artesia, New Mexico 88210  
Attn: Mr. Bryan Arrant

Re: Statewide Rule 118  
Hydrogen Sulfide Gas Contingency Plan  
Proposed Grayburg Deep Unit Wells

Dear Mr. Arrant:

In accordance with NMAC 19.15.3.118 C. (1) governing the determination of the hydrogen sulfide concentration in gaseous mixtures in each of its operations, Gruy Petroleum Management Co. does not anticipate that there will be enough H<sub>2</sub>S from the surface to the Morrow/Atoka formations to meet the OCD's minimum requirements for the submission of a contingency plan for the drilling and completion of the following tests:

Grayburg Deep Unit No. 16 – E/2, 24-17S-29E – 855' FSL & 1330' FEL

Grayburg Deep Unit No. 17 – S/2, 19-17S-30E – SHL 1990' FSL & 445' FWL BHL 2300' FSL & 660' FWL

\* Grayburg Deep Unit No. 18 – E/2, 24 17S-29E – 580' FNL & 460' FEL

Grayburg Deep Unit No. 20 – S/2, 19-17S-30E – 1640' FSL & 2100' FEL

If anything further is needed regarding this issue, or if you have any questions, please feel free to contact the undersigned at 972-443-6489.

Yours truly,

Zeno Farris  
Manager, Operations Administration

BLM-CARLSBAD FIELD OFFICE  
UNITED STATES

DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

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

0363

SUNDRY NOTICES AND REPORTS ON WELLS

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

OPERATOR'S COPY

|   |                           |
|---|---------------------------|
| 5. Lease Serial No.                         | LC 028784 A               |
| 6. If Indian, Allottee or Tribe Name        |                           |
| 7. If Unit or CA/Agreement, Name and/or No. | NM 79054X                 |
| 8. Well Name and No.                        | Grayburg Deep Unit No. 18 |
| 9. API Well No.                             | 30-015- 34905             |
| 10. Field and Pool, or Exploratory Area     | Anderson; Penn            |
| 11. County or Parish, State                 | Eddy Co., NM              |

SUBMIT IN TRIPLICATE - Other instructions on reverse side

|  |   |
|--|---|
| 1. Type of Well<br><input type="checkbox"/> Oil Well <input checked="" type="checkbox"/> Gas Well <input type="checkbox"/> Other |   |
| 2. Name of Operator<br>Gruy Petroleum Management Co.   |   |
| 3a. Address<br>P. O. Box 140907 Irving, TX 75014-0907  | 3b. Phone No. (include area code)<br>972-401-3111 |
| 4. Location of Well (Footage, Sec., T., R., M., or Survey Description)<br>690' FNL & 950' FEL<br>Section 24-T17S-R29E            |   |

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

| TYPE OF SUBMISSION                                    | TYPE OF ACTION                                |   |  |  |
|---|---|---|--|--|
| <input 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 checked="" 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 checked="" type="checkbox"/> Other Move SHL |
|   | <input 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 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 recomple 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 recomple 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.)

Gruy has moved the SHL for the Grayburg Deep Unit No. 18 as shown above. Arc has been requested.

\* See attached.

|   |   |
|---|---|
| 14. I hereby certify that the foregoing is true and correct |   |
| Name (Printed/Typed)<br>Zeno Farris                         | Title<br>Manager, Operations Administration |
| Signature<br><i>Zeno Farris</i>                             | Date<br>01-09-06                            |

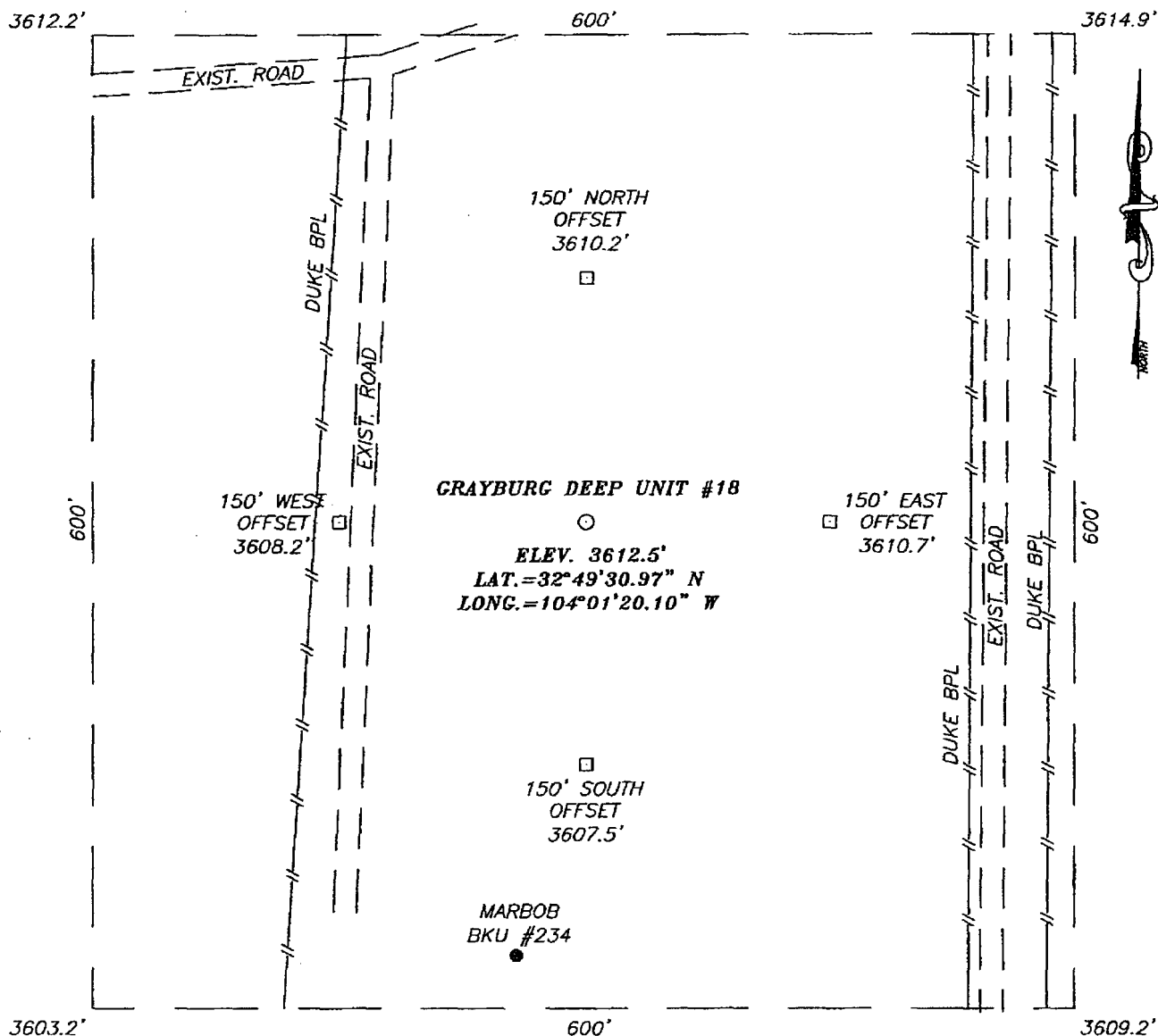
THIS SPACE FOR FEDERAL OR STATE OFFICE USE

|  |                        |                 |
|--|------------------------|-----------------|
| Approved by<br><i>[Signature]</i> Acting | Title<br>FIELD MANAGER | Date<br>1/31/06 |
| Office<br>CARLSBAD FIELD 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.

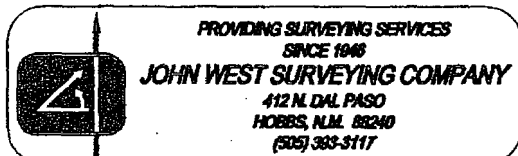
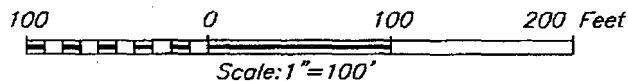
(Instructions on reverse)

**SECTION 24, TOWNSHIP 17 SOUTH, RANGE 29 EAST, N.M.P.M.,**  
 EDDY COUNTY, NEW MEXICO



**DIRECTIONS TO LOCATION**

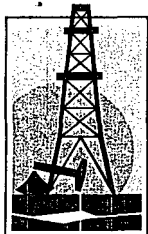
FROM THE INTERSECTION OF ST. HWY. #82 AND CO. RD. #216 (GENERAL AMERICAN) GO WEST ON ST. HWY. #82 FOR APPROX. 0.1 MILES. TURN RIGHT AND GO NORTH APPROX. 0.5 MILES. THIS LOCATION IS APPROX. 250 FEET WEST OF ROAD.



**GRUY PETROLEUM MANAGEMENT COMPANY**

GRAYBURG DEEP UNIT #18 WELL  
 LOCATED 690 FEET FROM THE NORTH LINE  
 AND 950 FEET FROM THE EAST LINE OF SECTION 24,  
 TOWNSHIP 17 SOUTH, RANGE 29 EAST, N.M.P.M.,  
 EDDY COUNTY, NEW MEXICO.

|                         |                     |
|-------------------------|---------------------|
| Survey Date: 12/23/05   | Sheet 1 of 1 Sheets |
| W.O. Number: 05.11.1878 | Dr By: LA           |
| Date: 1/4/06            | Rev 1: N/A          |
| Disk: CD#4              | 05111878            |
| Scale: 1"=100'          |                     |



## Gruy Petroleum Management Co.

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

*A wholly-owned subsidiary of Magnum Hunter Resources, Inc., an American Stock Exchange company*

### 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.: LC-028784-A

Legal Description: E/2 Sec 24, T17S-R29E  
Containing 320.00 acres, Lea County New Mexico

Formation (S): Morrow

Bond Coverage: Nationwide BLM Bond

BLM Bond File No.: NM 2575

Authorized Signature: Zeno Farris  
Representing Gruy Petroleum Management Co.

Name: Zeno Farris

Title: Manager, Operations Administration

Date: 04/27/05

## Application to Drill

Gruy Petroleum Management Co.  
Grayburg Deep Unit No. 18  
Unit Letter A Section 24  
T17S - R29E 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: 580' FNL & 460' FEL Sec. 24- 17S-29E
- 2 Elevation above sea level: GR 3614'
- 3 Geologic name of surface formation: Quaternary 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: 12500'
- 6 Estimated tops of geological markers:

|            |        |
|------------|--------|
| Rustler    | 500'   |
| San Andres | 3400   |
| Wolfcamp   | 8200'  |
| Atoka      | 10200' |
| Morrow     | 10800' |
- 7 Possible mineral bearing formation:

|                     |     |
|---------------------|-----|
| Grayburg/San Andres | Oil |
| Atoka               | Gas |
| Morrow              | Gas |
- 8 Casing program:

| Hole Size | Interval | Casing OD | Weight | Thread | Collar | Grade      |
|-----------|----------|-----------|--------|--------|--------|------------|
| 17 1/2"   | 0-500'   | 13 3/8"   | 54.5   | 8-R    | ST&C   | J-55       |
| 12 1/4"   | 0-4000'  | 9 5/8"    | 40     | 8-R    | ST&C   | P-110/N-80 |
| 7 7/8"    | 0-12500' | 5 1/2"    | 17     | 8-R    | ST&C   | P-110      |

## Application to Drill

Gruy Petroleum Management Co.  
Grayburg Deep Unit No. 18  
Unit Letter A Section 24  
T17S - R29E Eddy County, NM

### 9 Cementing & Setting Depth:

|         |              |  |
|---------|--------------|--|
| 13 3/8" | Surface      | Set 375' to 525' of 13 3/8" J-55 54.5 ST&C casing to a depth of 25' into the Rustler. Cement with 490 Sx. Of Class "C" cement + additives, circulate cement to surface.  |
| 9 5/8"  | Intermediate | Set 4000' of 9 5/8" P-110/N-80 40# ST&C casing Cement in two stages, first stage cement with 1000 Sx. Of Class POZ/C Cement + additives, second stage cement with 200 Sx. Of Class "C" + additives, circulate cement to surface. |
| 5 1/2"  | Production   | Set 12500' of 5 1/2" P-110 17# ST&C casing. Cement in two stages, first stage cement with 1020 Sx. of Class POZ/C Cement + additives. Second stage cement with 600 Sx of Class "C" Estimated top of cement 2700'.                |

### 10 Pressure control Equipment:

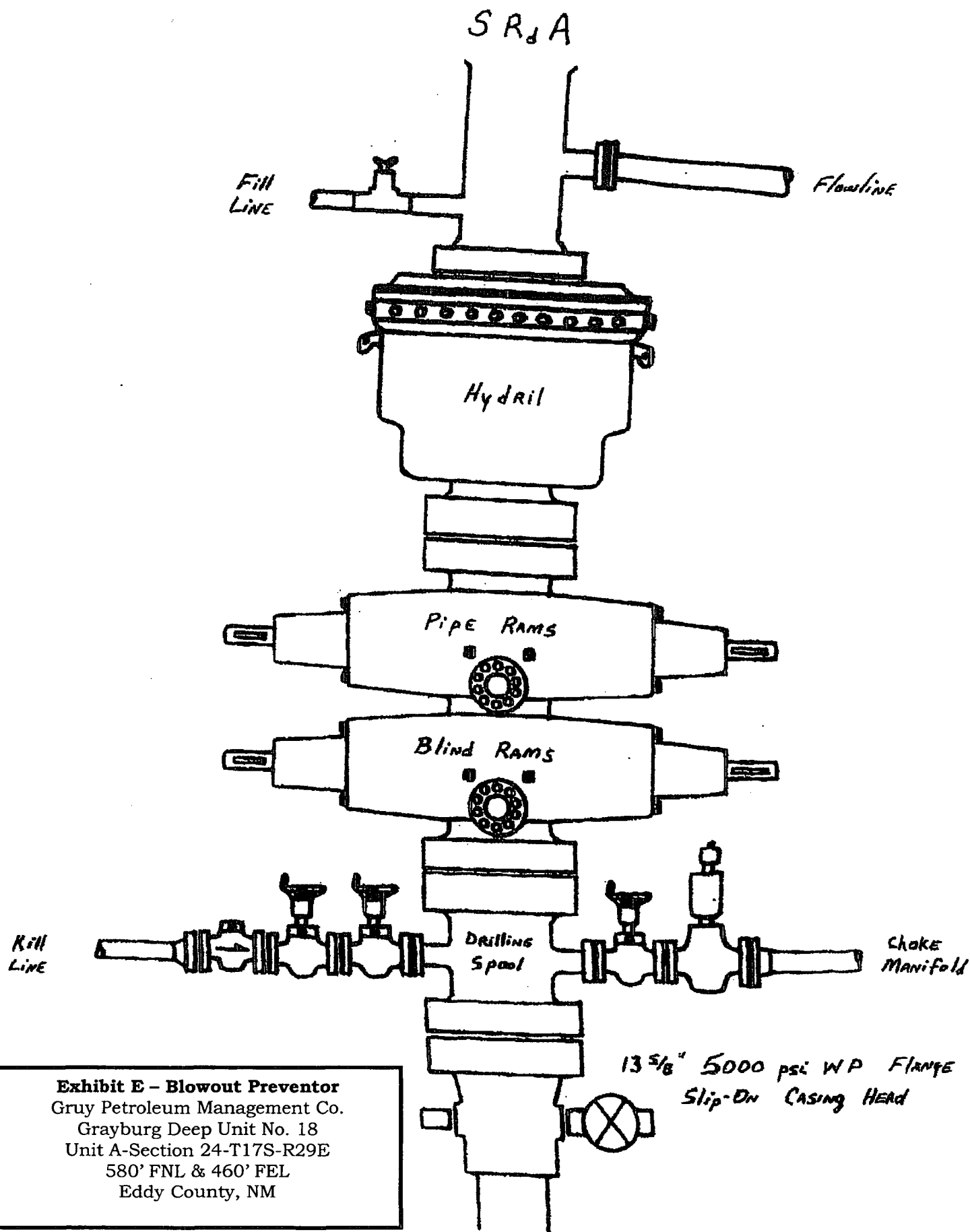
Exhibit "E". A 13 3/8" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000 # annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000'. A kelly 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 nipped 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 - 500'        | 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.                                      |
| 500' - 4000'    | 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. |
| 4000' - 8300'   | 8.4 - 9.9  | 28 - 29   | NC             | Brine 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' - 12500' | 8.9 - 9.7  | 29 - 45   | NC             | XCD Polymer mud system.   |

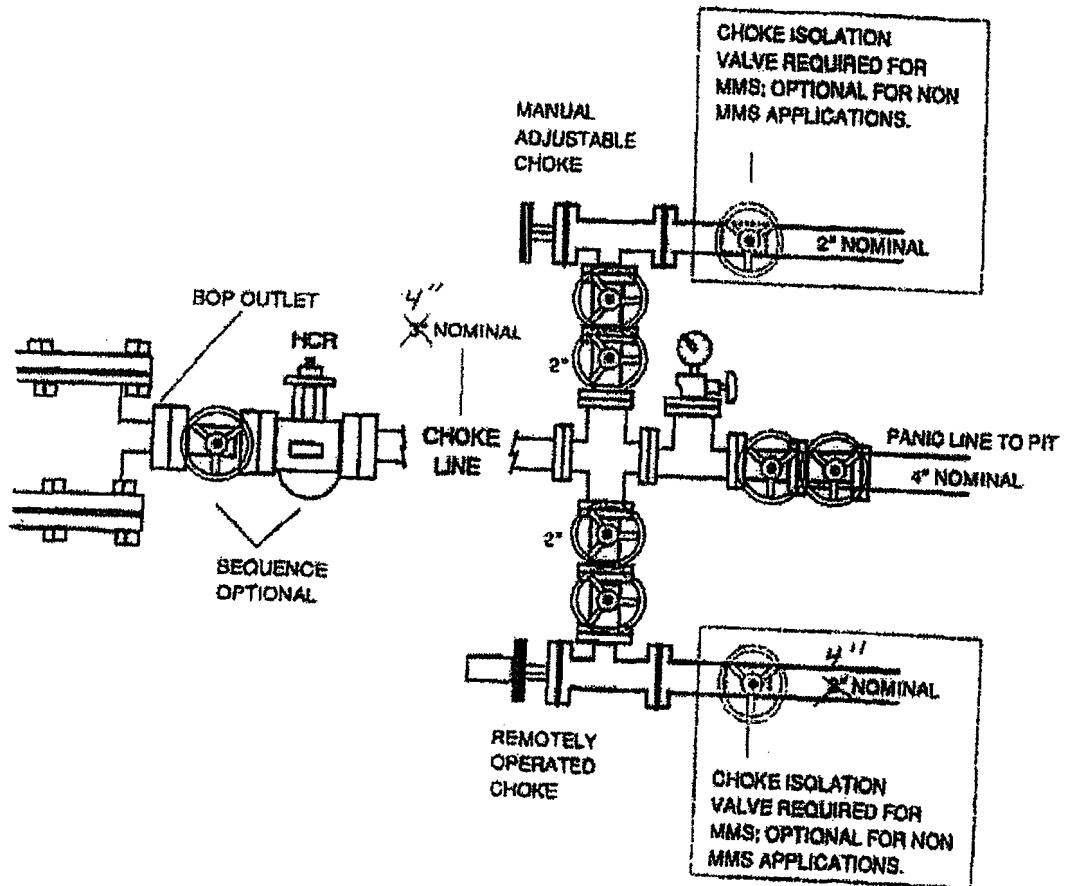
Sufficient mud materials will be kept on location at all times in order to combat lost circulation, or unexpected kicks. In order to run DST's, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs. Mud system monitoring equipment with derrick floor 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.





**Exhibit E - Blowout Preventor**  
 Gruy Petroleum Management Co.  
 Grayburg Deep Unit No. 18  
 Unit A-Section 24-T17S-R29E  
 580' FNL & 460' FEL  
 Eddy County, NM

DRILLING OPERATIONS  
CHOKE MANIFOLD  
5M SERVICE



**Exhibit E Cont'd - Choke Manifold Diagram**

Gruy Petroleum Management Co.  
 Grayburg Deep Unit No. 18  
 Unit A-Section 24-T17S-R29E  
 580' FNL & 460' FEL  
 Eddy County, NM

## **Application to Drill**

Gruy Petroleum Management Co.  
Grayburg Deep Unit No. 18  
Unit Letter A Section 24  
T17S - R29E Eddy County, NM

12 Testing, Logging and Coring Program:

- A. Mud logging program: One-man unit from 8000' to TD
- B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR
- C. No DST's, or cores are planned at this time.

13 Potential Hazards:

No abnormal pressures or temperatures are expected. The area has a potential H2S hazard. An H2S drilling plan is attached. Adequate flare lines will be installed off the mud / gas separator where gas may be flared safely. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 4000 PSI, estimated BHT 175.

14 Anticipated Starting Date and Duration of Operations:

Road and location construction will begin after BLM approval of APD. Anticipated spud date as soon as approved. Drilling expected to take 35 - 45 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15 Other Facets of Operations:

After running casing, cased hole gamma ray neutron collar logs will be run from total depth over possible pay intervals. The Morrow pay will be perforated and stimulated. The well will be tested and potentialized as a gas well.

## **Hydrogen Sulfide Drilling Operations Plan**

- 1 All Company and Contract personnel admitted on location must be trained by a qualified H<sub>2</sub>S safety instructor to the following:
  - A. Characteristics of H<sub>2</sub>S
  - B. Physical effects and hazards
  - C. Proper use of safety equipment and life support systems.
  - D. Principle and operation of H<sub>2</sub>S detectors, warning system and briefing
  - E. Evacuation procedure, routes and first aid.
  - F. Proper use of 30 minute pressure demand air pack.
- 2 H<sub>2</sub>S Detection and Alarm Systems
  - A. H<sub>2</sub>S detectors and audio alarm system to be located at bell nipple, end of flow line (mud pit) and on derrick floor or doghouse.
- 3 Windsock and/or wind streamers
  - A. Windsock at mudpit area should be high enough to be visible.
  - B. Windsock at briefing area should be high enough to be visible.
- 4 Condition Flags and Signs
  - A. Warning sign on access road to location.
  - B. Flags to be displayed on sign at entrance to location. Green flag, normal safe condition. Yellow flag indicates potential pressure and danger. Red flag, danger, H<sub>2</sub>S present in dangerous concentration. Only emergency personnel admitted to location
- 5 Well control equipment
  - A. See exhibit "E"
- 6 Communication
  - A. While working under masks chalkboards will be used for communication.
  - B. Hand signals will be used where chalk board is inappropriate.
  - C. Two way radio will be used to communicate off location in case of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.
- 7 Drillstem Testing not anticipated.

## **Hydrogen Sulfide Drilling Operations Plan**

- 8 Drilling contractor supervisor will be required to be familiar with the effects H<sub>2</sub>S has on tubular goods and other mechanical equipment.
- 9 If H<sub>2</sub>S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas separator will be brought into service along with H<sub>2</sub>S scavengers if

## Surface Use Plan

Gruy Petroleum Management Co.  
Grayburg Deep Unit No. 18  
Unit Letter A Section 24  
T17S - R29E Eddy County, NM

- 1 Existing Roads: Area maps, Exhibit "B" is a reproduction of Lea Co. General Highway Map. Exhibit "C" is a reproduction of a USGS Topographic Map, showing existing roads and proposed roads. All existing roads will be maintained in a condition equal to or better than current conditions. Any new roads will be constructed to BLM specifications.
  - A. Exhibit "A" shows the proposed well site as staked.
  - B. From the intersection of Hwy 82 and General American Road West of Loco Hills go West on US Hwy 82 0.1 miles. Turn right and go North 0.4 miles. Proposed well is 250' East of road.
- 2 PLANNED ACCESS ROADS: No new access road will be constructed.
- 3 LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A"
  - A. Water wells - None known
  - B. Disposal wells - None known
  - C. Drilling wells - None known
  - D. Producing wells - As shown on Exhibit "A"
  - E. Abandoned wells - As shown on Exhibit "A"

## **Surface Use Plan**

Gruy Petroleum Management Co.  
Grayburg Deep Unit No. 18  
Unit Letter A Section 24  
T17S - R29E Eddy County, NM

- 4 If, on completion this well is a producer Gruy Petroleum Management Co. will furnish maps and/or plats showing on site facilities or off site facilities if needed. This will be accompanied with a Sundry Notice.

5 LOCATION AND TYPE OF WATER SUPPLY:

Water will be purchased locally from a commercial source and trucked over the access roads or piped in flexible lines laid on top of the ground.

6 SOURCE OF CONSTRUCTION MATERIAL:

If possible construction will be obtained from the excavation of drill site, if additional material is needed it will be purchased from a local source and transported over the access route as shown on Exhibit "C".

7 METHODS OF HANDLING WASTE MATERIAL:

- A. Drill cuttings will be disposed of in the reserve pit.
- B. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed all contents will be removed and disposed of in a approved sanitary land fill.
- C. Salts remaining after completion of well will be picked up by supplier including broken sacks.
- D. Sewage from living quarters will drain into holding tanks and be cleaned out periodically. A Porta-John will be provided for the rig crews. This equipment will be properly maintained during the drilling operations and removed upon completion of the well.
- E. Remaining drilling fluids will be allowed to evaporate in the reserve pit until the pit is dry enough for breaking out. In the event that drilling fluids do not evaporate in a reasonable time they will be hauled off by transports and be disposed of at a state approved disposal facility. Later pits will be broken out to speed drying. Water produced during testing will be put in reserve pits. Any oil or condensate produced will be stored in test tanks until sold and hauled from the site.

8 ANCILLARY FACILITIES:

- A. No camps or airstrips to be constructed.

## **Surface Use Plan**

Gruy Petroleum Management Co.  
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### **9 WELL SITE LAYOUT**

- A. Exhibit "D" shows location and rig layout.
- B. This exhibit indicates proposed location of reserve and trash pits; and living facilities.
- C. Mud pits in the active circulating system will be steel pits and the reserve pit is proposed to be unlined, unless subsurface condition encountered during pit construction indicate that lining is needed for lateral containment of fluids.
- D. If needed, the reserve pit is to be lined with PVC or polyethylene line. The pit liner will be 6 mils thick. Pit liner will extend a minimum, 2'00" over the reserve pits dikes where the liner will be anchored down.
- E. The reserve pit will be fenced on three sides with four strands of barbed wire during drilling and completion phases. The fourth side will be fenced after all drilling operations have ceased. If the well is a producer, the reserve pit fence will be torn down. The reserve pit and those areas of the location not essential to production facilities will be reclaimed and seeded per BLM requirements.

### **10 PLANS FOR RESTORATION OF SURFACE**

Rehabilitation of the location and reserve pit will start in a timely manner after all drilling operations cease. The type of reclamation will depend on whether the well is a producer or a dry hole.

However, in either event, the reserve pit will be allowed to dry properly, and fluid removed and disposed of in accordance with Article 7.B as previously noted. The pit area will then be leveled and contoured to conform to the original and surrounding area. Drainage systems, if any, will be reshaped to the original configuration with provisions made to alleviate erosion. These may need to be modified in certain circumstances to prevent inundation of the location's pad and surface facilities. After the area has been shaped and contoured, topsoil from the spoil pile will be placed over the disturbed area to the extent possible. Revegetation procedures will comply with BLM standards.

If the well is a dry hole, the pad and road area will be recoutered to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM standards.

Should the well be a producer, the previously noted procedures will apply to those areas which are not required for production facilities.



## Surface Use Plan

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### 11 OTHER INFORMATION:

- A. Topography consists of a sloping plane with loose tan sands. Vegetation is mainly yucca, mesquite and shin oak.
- B. The wellsite is on surface owned by The United States Department of the Interior, Bureau of Land Management. The land is used mainly for farming, cattle ranching, recreational use, and oil and gas production.
- C. An Archaeological survey will be conducted on the location and proposed roads, and this report will be filed with the Bureau of Land Management in the Carlsbad BLM office.
- D. The Taylor residence in section NW/4 19-17S-30E is within 1 1/2 miles of this location.

### 12 OPERATORS REPRESENTATIVE:

Gruy Petroleum Management Company  
P.O. Box 14097  
Irving, TX 75014  
Office Phone: (972) 443-6489  
Zeno Farris

- 13 **CERTIFICATION:** I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Gruy Petroleum Management Company and/or its contractors/subcontractors and is in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of U.S.C. 1001 for the filing of a false statement.

NAME: Zeno Farris

DATE: 4/25/2005

TITLE: Manager, Operations Administration