New Mexico Oil Conservation Division, District I
1625 N. French Drive
Hobbs, NM 88240

Form 3160-3
(July 1992)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR DEEPEN

5. LEASE DESIGNATION AND SERIAL NO.: NMLC030174A

6. IF INDIAN, ALLOTTES OR TRIBE NAME:

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ]

1b. TYPE OF WELL: OIL WELL [ ] GAS WELL [X] OTHER SINGLE ZONE [X] MULTIPLE ZONE [ ]

7. UNIT AGREEMENT NAME: Rhodes Federal Unit (22321)

2. NAME OF OPERATOR: Gruy Petroleum Management Co. (162683)

8. FARM OR LEASE NAME, WELL NO.: Rhodes Federal Unit No. 226

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

9. API WELL NO.: 30-025-37414

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*): 1980' FNL & 1550' FEL

Unit G

10. FIELD AND POOL, OR WILDCAT: (83810) Rhodes; Yates-7 Rivers (Gas)

11. SEC. T. R. M. BLOCK AND SURVEY OR AREA: 22-T26S-R37E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 5 miles southeast of Jal, New Mexico

12. COUNTY OR PARISH: Lea

13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, T.O (Also to nearest drlg. unit line, if any): 1550'

16. NO. OF ACRES IN LEASE: 640

17. NO. OF ACRES ASSIGNED TO THIS WELL: 160

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 1224'

19. PROPOSED DEPTH: 4000'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 2979' GR

CAPITAN CONTROLLED WATER BASIN

22. APPROX. DATE WORK WILL START*: 6-30-05

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	GRADE,SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	J-55 8 5/8"	24#	1050'	600 sx circ to surf
7 7/8"	J-55 5 1/2"	15.5#	4000'	1150' sx circ to surf

The proposed well will be drilled to a depth of 4000' and completed as a Rhodes; Yates-7 Rivers (Gas) producer.

From the base of the surface pipe through the running of production casing, the well will be equipped with a 3000 psi BOP system.

APPROVAL SUBJECT TO
GENERAL REQUIREMENTS
AND SPECIAL STIPULATIONS
ATTACHED

OPER. OGRID NO. 162683
PROPERTY NO. 22321
POOL CODE 83810
EFF. DATE 8/17/05
API NO. 30-025-37414

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.

24

SIGNED Zeno Farris TITLE Mgr. Ops. Admin. DATE 05-23-05

(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/ Joe G. Lara TITLE ACTING FIELD MANAGER DATE AUG - 8 2005

*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 within its jurisdiction.

APPROVAL FOR 1 YEAR

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., an American Stock Exchange company

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Bureau of Land Management
2909 West 2nd 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-030174-A

Legal Description: NE/4 Sec 22, T26S-R37E
Containing 160.00 acres, Lea County New Mexico

Formation (S): Rhodes Yates Seven Rivers

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: 05/24/05

Application to Drill

Gruy Petroleum Management Co.
Rhodes Federal Unit No. 226
Unit G - Section 22-T26S-R37E; 1980' FNL & 1550' FEL
Lea 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: 1980' FNL & 1550' FEL; Section 22-T26S-R37E; Lea County, NM

2 Elevation above sea level: 2979' GR

3 Geologic name of surface formation: Quaternery Aeolian Deposits

4 Drilling tools and associated equipment: Conventional rotary drilling rig using fluid as a circulating medium for solids removal.

5 Proposed drilling depth: 4000'

6 Estimated tops of geological markers:

Rustler Anhydrite	1030'	Yates	2700'
Salado Salt	1330'	7 Rivers	3050'
Tansil	2535'		

7 Possible mineral bearing formation:

Tansil	Gas
Yates	Gas
7 Rivers	Gas

8 Casing program:

Hole Size	Interval	Casing OD	Weight	Thread	Collar	Grade
12 1/4"	0-1050'	8 5/8"	24	8-R	ST&C	J-55
7 7/8"	0-4000'	5 1/2"	15.5	8-R	ST&C	J-55

Application to Drill

Gruy Petroleum Management Co.
Rhodes Federal Unit No. 226
Unit G - Section 22-T26S-R37E; 1980' FNL & 1550' FEL
Lea County, NM

9 Cementing & Setting Depth:

8 5/8"	Surface	Set 1050' of 8 5/8" J-55 24# ST&C casing. Cement with 600 Sx. Of Class "C" cement + additives, circulate cement to surface.
5 1/2"	Production	Set 4000' of 5 1/2" J-55 15.5# ST&C casing. Cement in two stages, first stage cement with 400 Sx. Of Class "C" Cement + additives, second stage cement with 600 Sx. Of Class "C" Halco Light + additives, circulate cement to surface.

10 Pressure control Equipment: Exhibit "E". A series 900 3000PSI working pressure B.O.P. consisting of a double ram type preventor with a bag type annular preventor. BOP unit will be hydraulically operated. Exhibit "E-1" is a Choke manifold and closing unit. BOP will be nipped up on the 8 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. Flo sensor, PVT, full opening stabbing valve and upper kelly cock will be utilized. No abnormal pressure or temperature is expected while drilling.

11 Proposed Mud Circulating System:

Depth	Mud Wt	Viscosity	Fluid Loss	Type Mud
0 - 1050'	8.6 - 8.9	29 - 36	NC	Fresh water spud mud add paper to control seepage and high viscosity sweeps to clean hole.
1050 - 4000'	10 - 10 - 3	29 - 38	NC	Brine water add paper as needed to control seepage and add lime to control pH, Use high viscosity sweeps to clean hole.

Sufficient mud materials will be kept on location at all times in order to combat lost circulation or unexpected kicks. In order to run DSTs, open hole logs, and casing, the viscosity and water loss may have to be adjusted in order to meet these needs

Application to Drill

Gruy Petroleum Management Co.
Rhodes Federal Unit No. 226
Unit G - Section 22-T26S-R37E; 1980' FNL & 1550' FEL
Lea County, NM

12 Testing, Logging and Coring Program:

A. Open hole logs: Dual Laterolog, Side Wall Neutron, Density Gamma Ray Caliper from TD to 750'

B. Run Gamma Ray, Neutron from 750' to surface.

C. No DSTs, cores or Mud Logger are planned at this time.

13 Potential Hazards:

No abnormal pressures or temperatures are expected. Hydrogen Sulfide gas may be encountered, H2S detectors will be in place to detect any presence. No lost circulation is expected to occur. All personnel will be familiar with all aspects of safe operation of equipment being used. Estimated BHP 750 PSI, estimated BHT 120 .

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 10 - 15 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 Tansil-Yates; 7 Rivers pay will be perforated and stimulated. The well will be swab tested and potentialed as a gas well.

Hydrogen Sulfide Drilling Operations Plan

1 All Company and Contract personnel admitted on location must be trained by a qualified H2S safety instructor to the following:

A. Characteristics of H2S
B. Physical effects and hazards
C. Proper use of safety equipment and life support systems.
D. Principle and operation of H2S detectors, warning system and briefing
E. Evacuation procedure, routes and first aid.
F. Proper use of 30 minute pressure demand air pack.

2 H2S Detection and Alarm Systems

A. H2S detectors and audio alarm system to be located at bell nipple, end of blooie 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, H2S present in dangerous concentration. Only emergency

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 emergency help is required. In most cases cellular telephoned will be available at most drilling foremen's trailers or living quarters.

7 No Drillstem Testing Anticipated

8 Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.

9 If H2S is encountered, mud system will be altered if necessary to maintain control of formation. A mud gas seperator will be brought into service along with H2S scavengers if

Surface Use Plan

Gruy Petroleum Management Co.
Rhodes Federal Unit No. 226
Unit G - Section 22-T26S-R37E; 1980' FNL & 1550' FEL
Lea 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 St Hwy #18 and St Hwy #128 in Jal, go Southeast on St Hwy #18 approx 6.2 miles. At mile marker 2.4 (increases to Northwest) turn left and go Southeast to approx 0.1 Miles. This location is approx 600'

C. Construct power lines and lay pipelines that will be necessary to produce this lease along road R-O-W.

2 PLANNED ACCESS ROADS: Approximately 265' of new road will be constructed.

A. The access road will be crowned and ditched to a 12' 00" wide travel surface with a 40' right-fo-way.

B. Gradient on all roads will be less than 5.00%.

C. No turnouts will be necessary.

D. If needed road will be surfaced with a mininum of 4" of caliche. This material will be obtained from a local source.

E. Ceterline for the new access road has been flagged. Earthwork will be required by field conditions.

F. Culverts in the acess road will not be used. The road will be constructed to utilize low water crossings for drainage as required by the topography

3 LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A-1"

A. Water wells - None known

B. Disposal wells - None known

C. Drilling wells - None known

D. Producing wells - As shown on Exhibit "A-1"

E. Abandoned wells - As shown on Exhibit "A-1"

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 by 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 the 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 an 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 holes with a minimum depth of 10'. These holes will be covered during drilling and will be back filled upon completion. 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.
Rhodes Federal Unit No. 226
Unit G - Section 22-T26S-R37E; 1980' FNL & 1550' FEL
Lea County, NM

9 WELL SITE LAYOUT

A. Exhibit "D" shows location and rig layout.

B. This exhibit indicates proposed location of reserve pits, trash pits, and living

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 indicates 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' dykes 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 recountered to match the existing terrain. Topsoil will be spread to the extent possible. Revegetation will comply with BLM

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

Gruy Petroleum Management Co.
Rhodes Federal Unit No. 226
Unit G - Section 22-T26S-R37E; 1980' FNL & 1550' FEL
Lea County, NM

11 OTHER INFORMATION:

A. Topography consists of sand dunes with a slight dip in the southwesterly direction. Vegatation is mainly native grasses and Mesquite trees with Shinnery Oak.

B. Surface and minerals are owned by The Bureau of Land Management, the US Department of the Interior. The surface is used mainly for the grazing of livestock and the production of oil and gas.

C. An Archaeological survey will be conducted of the location and proposed roads, then this report will be filed with the Bureau of Land Management in the Carlsbad BLM office.

D. There are no known dwellings within 1 1/2 mile 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 exits; 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 contractors/subcontractors is in the 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: 5/23/2005

TITLE: Manager, Operations Administration

State of New Mexico

Energy, Minerals and Natural Resources Department

DISTRICT I
1625 N. FRENCH DR., HOBBS, NM 88240

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

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

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name
30-025-37414	83810	Rhodes; Yates-7 Rivers (Gas)

Property Code	Property Name	Well Number
22321	RHODES FEDERAL UNIT	226

OGRID No.	Operator Name	Elevation
162683	GRUY PETROLEUM MANAGEMENT COMPANY	2983'

Surface Location

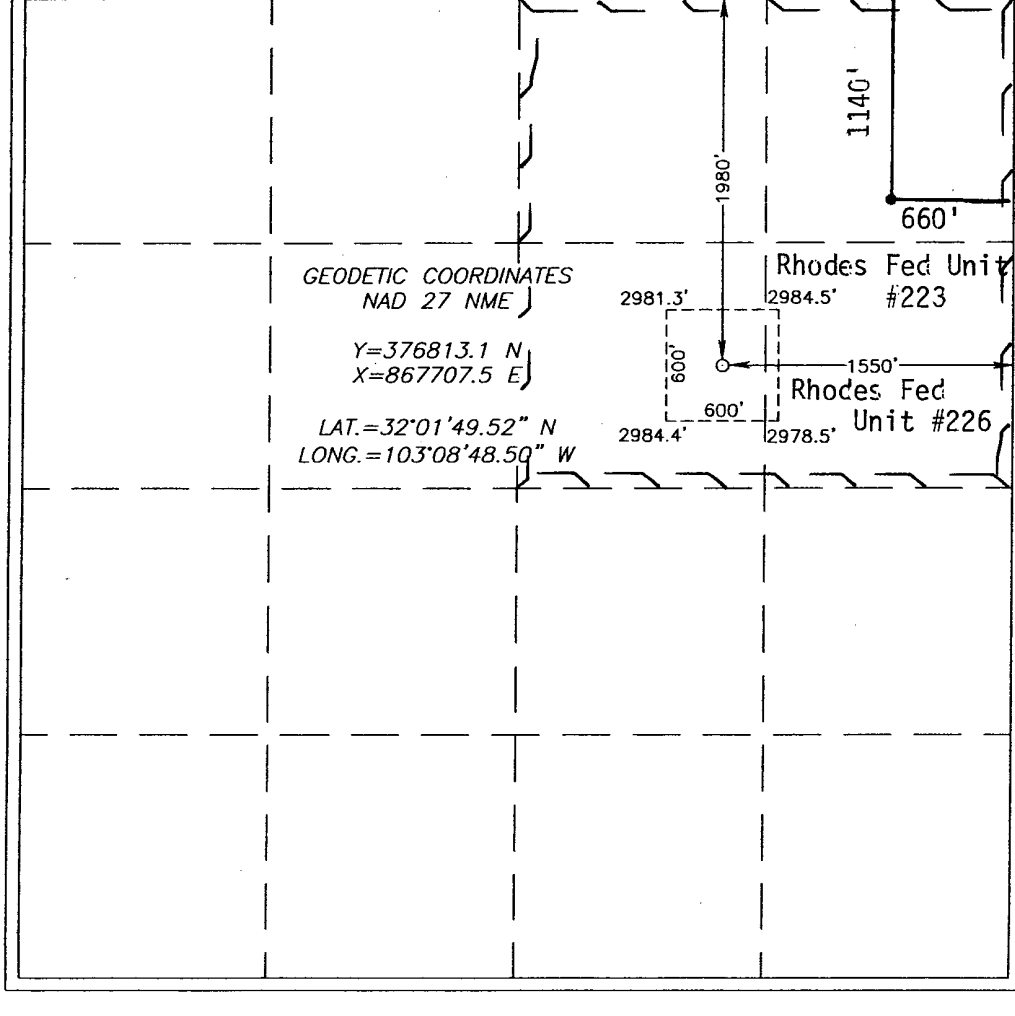
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	22	26-S	37-E		1980	NORTH	1550	EAST	LEA

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	Joint or Infill	Consolidation Code	Order No.
160	Y	U	

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



OPERATOR CERTIFICATION

I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.

Zeno Farris
Signature

Zeno Farris
Printed Name

Manager Operations Admin
Title

May 24, 2005
Date

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 supervison, and that the same is true and correct to the best of my belief.

MAY 6, 2005
Date Surveyed LA

Signature & Seal of Professional Surveyor

GARY G. EIDSON
NEW MEXICO
REGISTERED PROFESSIONAL SURVEYOR

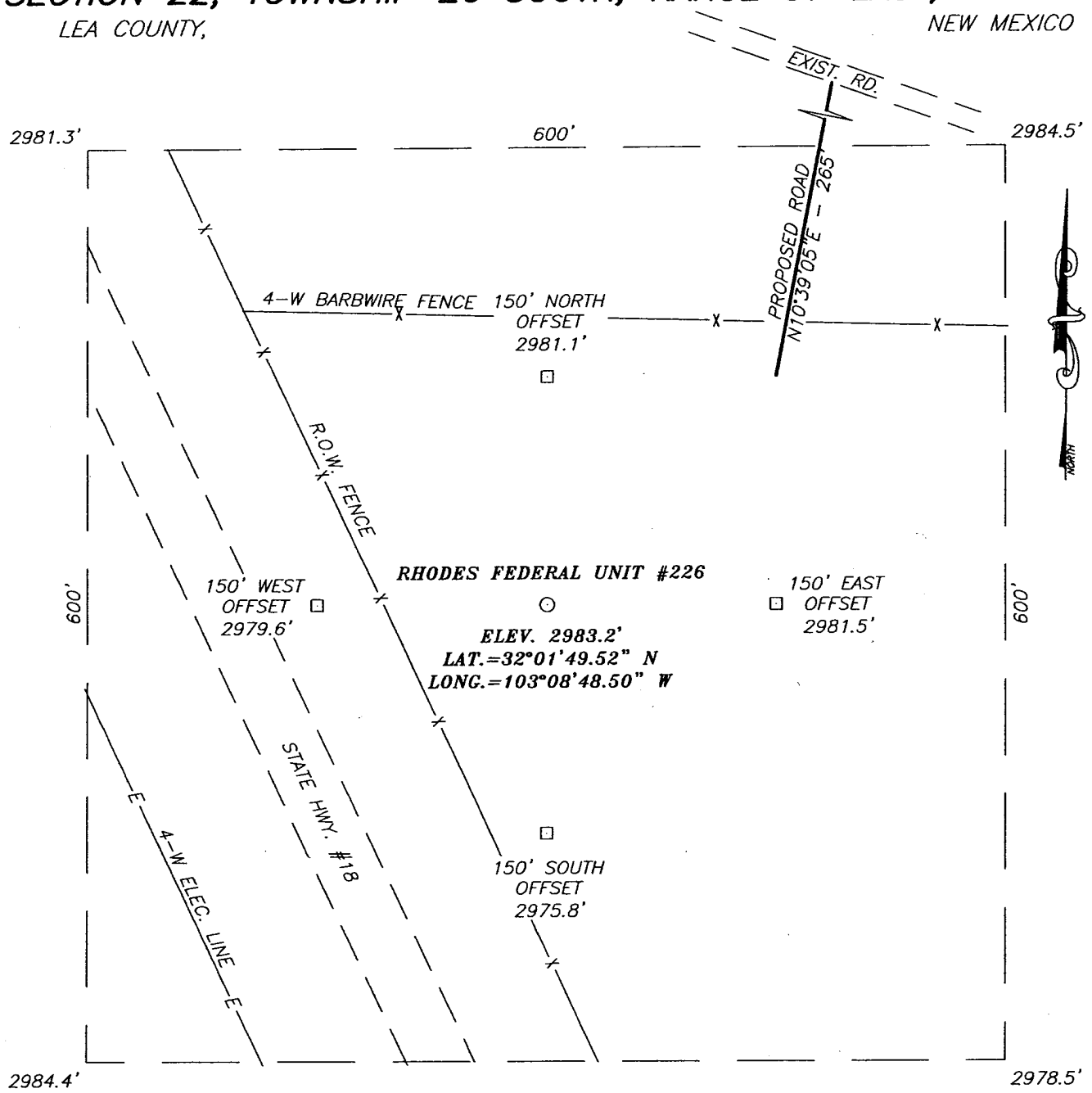
Gary G. Eidson 5/11/05

05.11.0688

Certificate No. GARY EIDSON 12641

SECTION 22, TOWNSHIP 26 SOUTH, RANGE 37 EAST, N.M.P.M.,

LEA COUNTY, NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF ST. HWY. #18 AND ST. HWY. #128 IN JAL, GO SOUTHEAST ON ST. HWY. #18 APPROX. 6.2 MILES AT MILE MARKER 2.4 (INCREASES TO NORTHWEST) TURN LEFT AND GO SOUTHEAST APPROX. 0.1 MILES. THIS LOCATION IS APPROX. 600' SOUTHWEST.

100 0 100 200 Feet

Scale:1"=100'

PROVIDING SURVEYING SERVICES SINCE 1946

JOHN WEST SURVEYING COMPANY

412 N. DAL PASO

HOBBS, N.M. 88240

(505) 393-3117

GRUY PETROLEUM MANAGEMENT COMPANY

RHODES FEDERAL UNIT #226 WELL
LOCATED 1980 FEET FROM THE NORTH LINE
AND 1550 FEET FROM THE EAST LINE OF SECTION 22,
TOWNSHIP 26 SOUTH, RANGE 37 EAST, N.M.P.M.,
LEA COUNTY, NEW MEXICO.

Survey Date: 5/6/05	Sheet 1 of 1 Sheets		
W.O. Number: 05.11.0688	Dr By: LA		Rev 1:N/A
Date: 5/10/05	Disk: CD#4	05110688	Scale:1"=100'

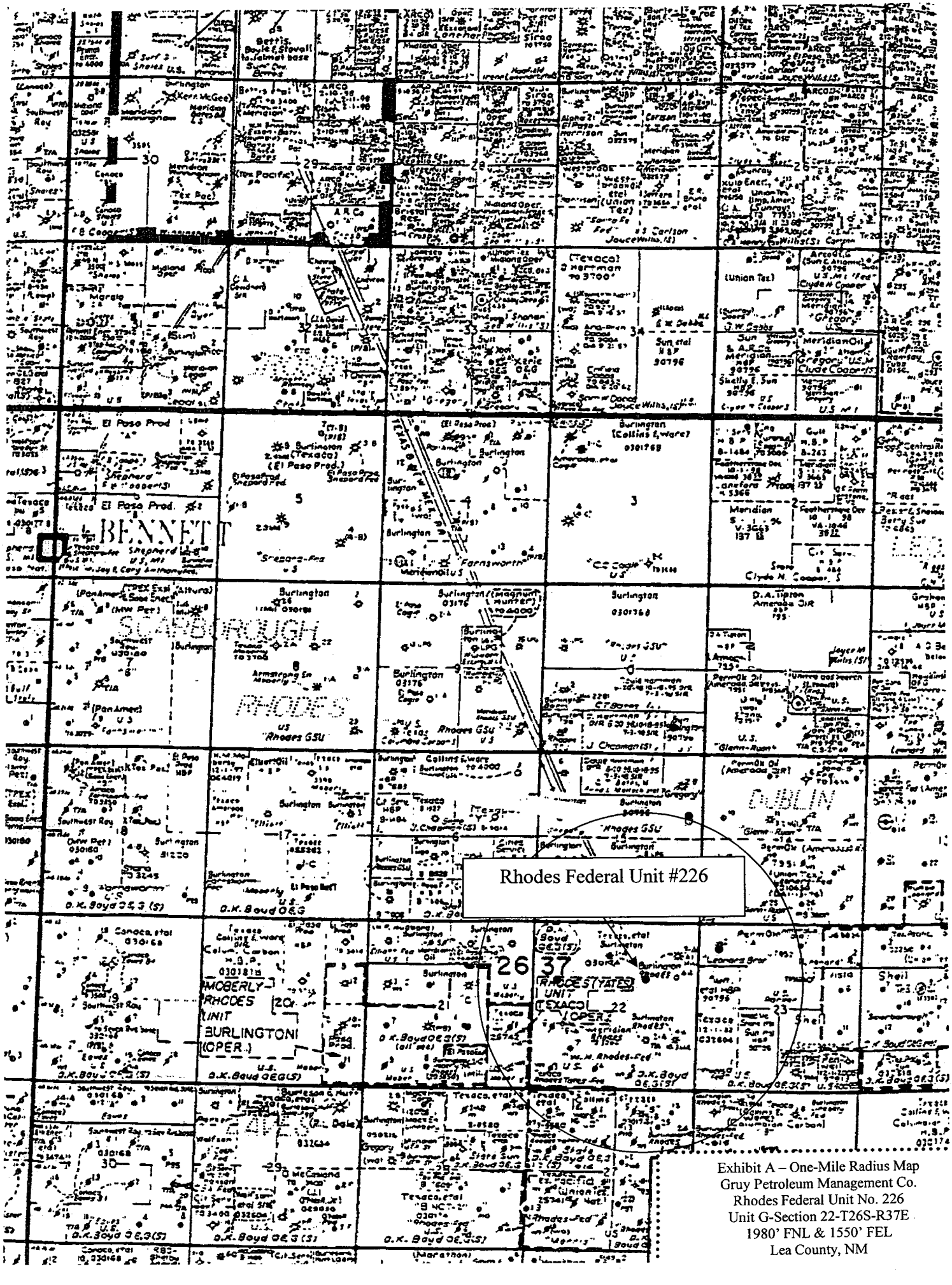
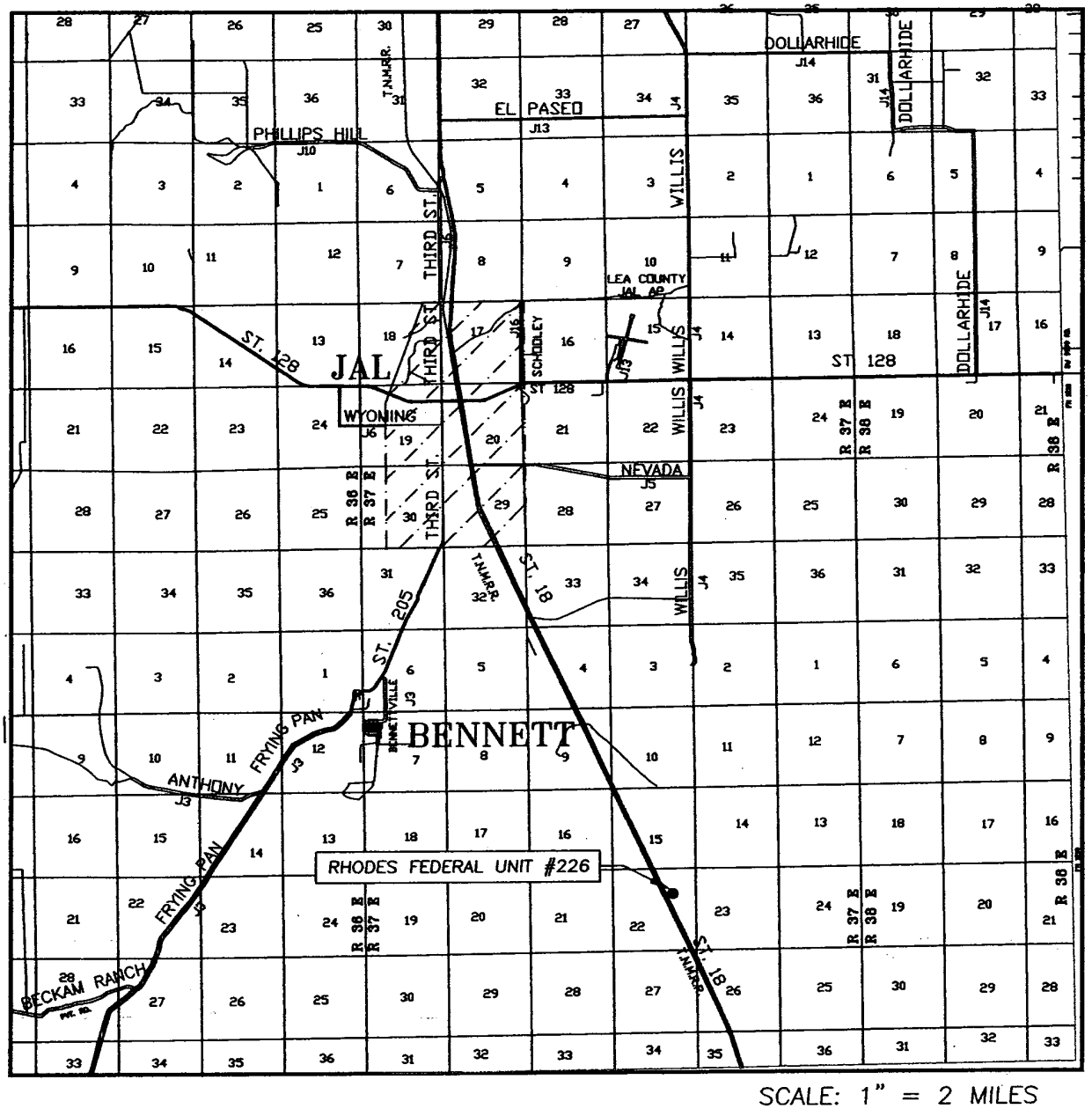


Exhibit A – One-Mile Radius Map
Gruy Petroleum Management Co.
Rhodes Federal Unit No. 226
Unit G-Section 22-T26S-R37E
1980' FNL & 1550' FEL
Lea County, NM

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 22 TWP. 26-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1980' FNL & 1550' FEL

ELEVATION 2983'

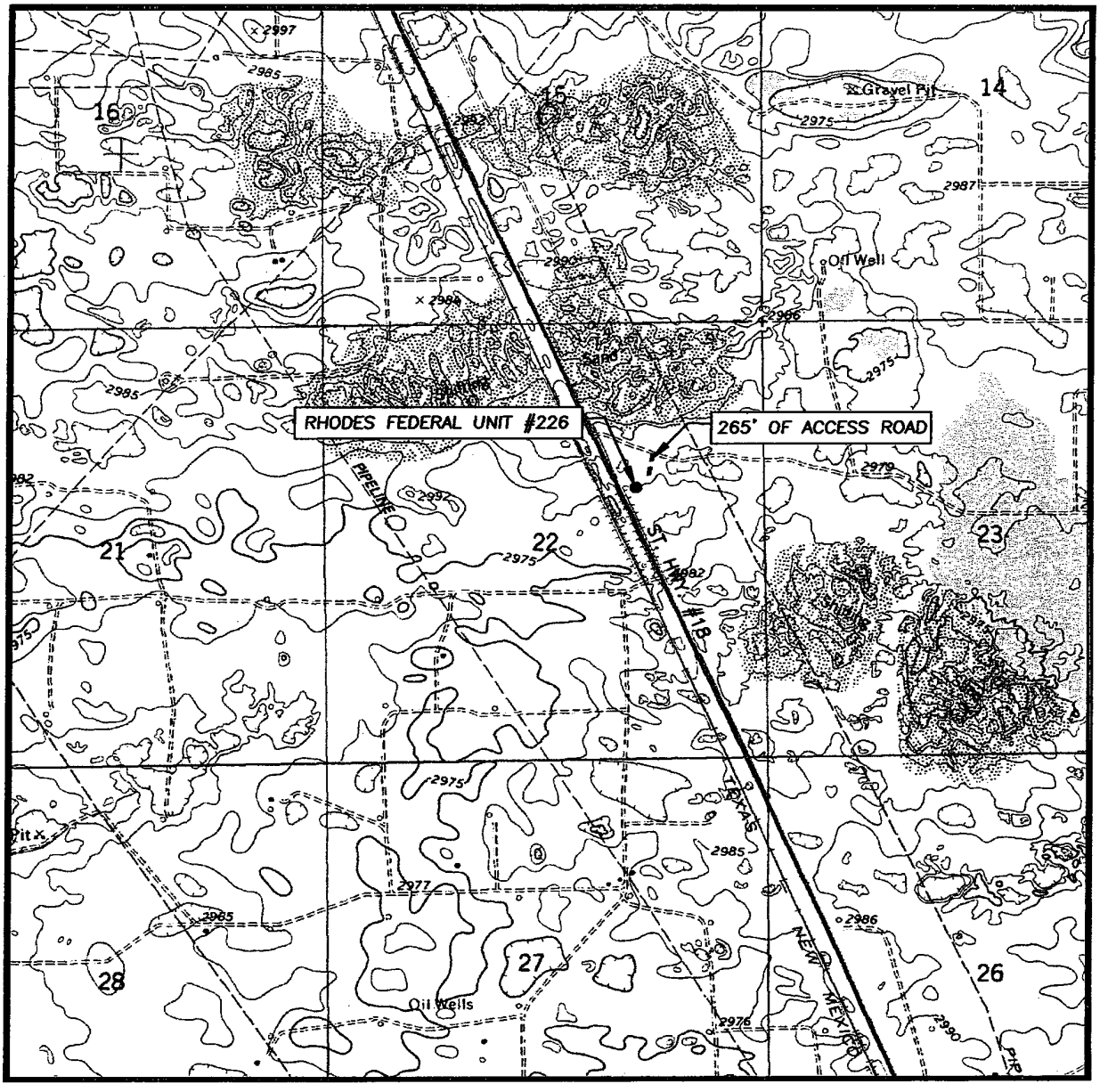
OPERATOR GRUY PETROLEUM MANAGEMENT COMPANY

LEASE RHODES FEDERAL UNIT

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117

Exhibit B

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL:
JAL, N.M. – 5'

SEC. 22 TWP. 26-S RGE. 37-E

SURVEY N.M.P.M.

COUNTY LEA

DESCRIPTION 1980' FNL & 1550' FEL

ELEVATION 2983'

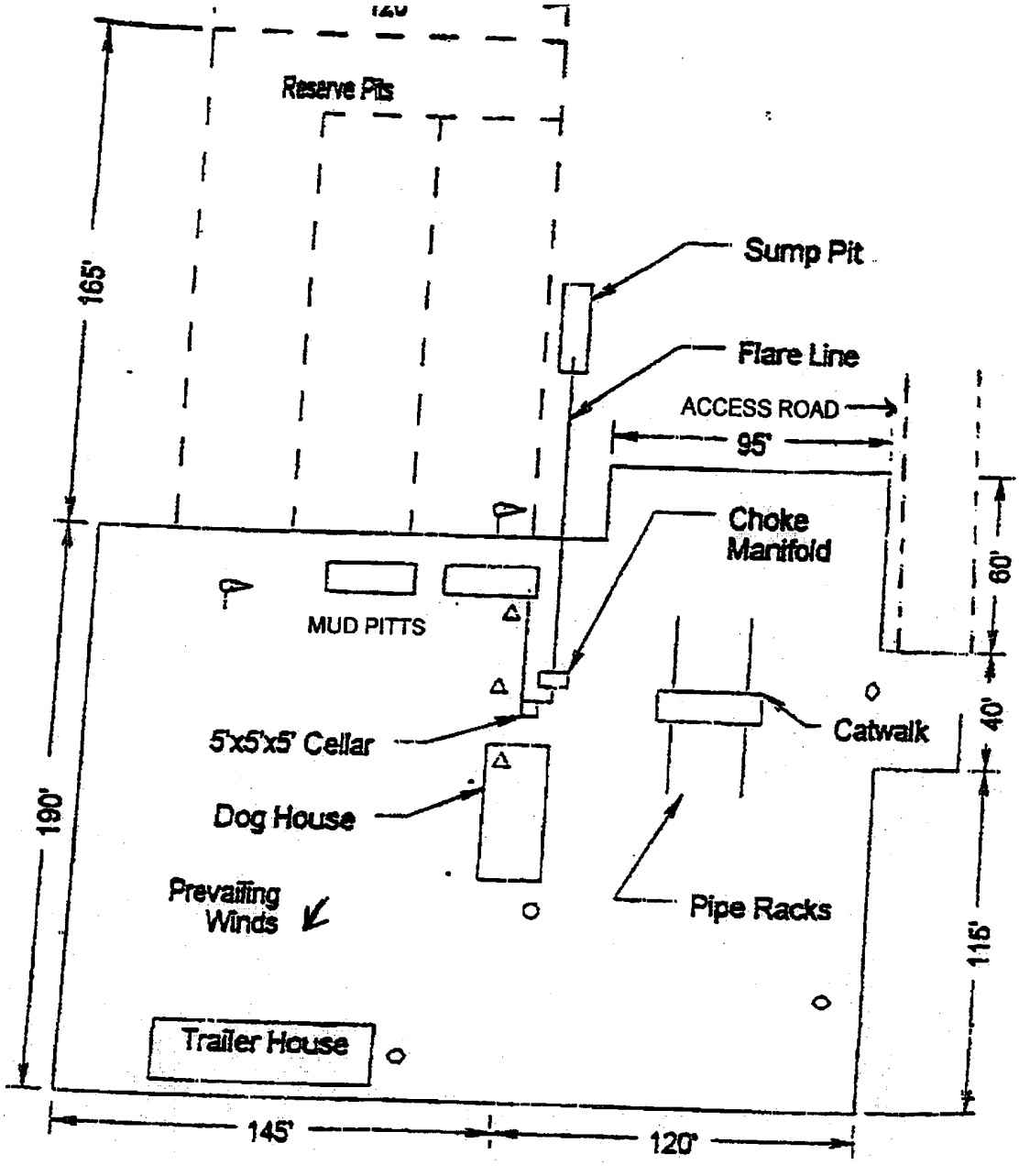
OPERATOR GRUY PETROLEUM MANAGEMENT COMPANY

LEASE RHODES FEDERAL UNIT

U.S.G.S. TOPOGRAPHIC MAP
JAL, N.M.

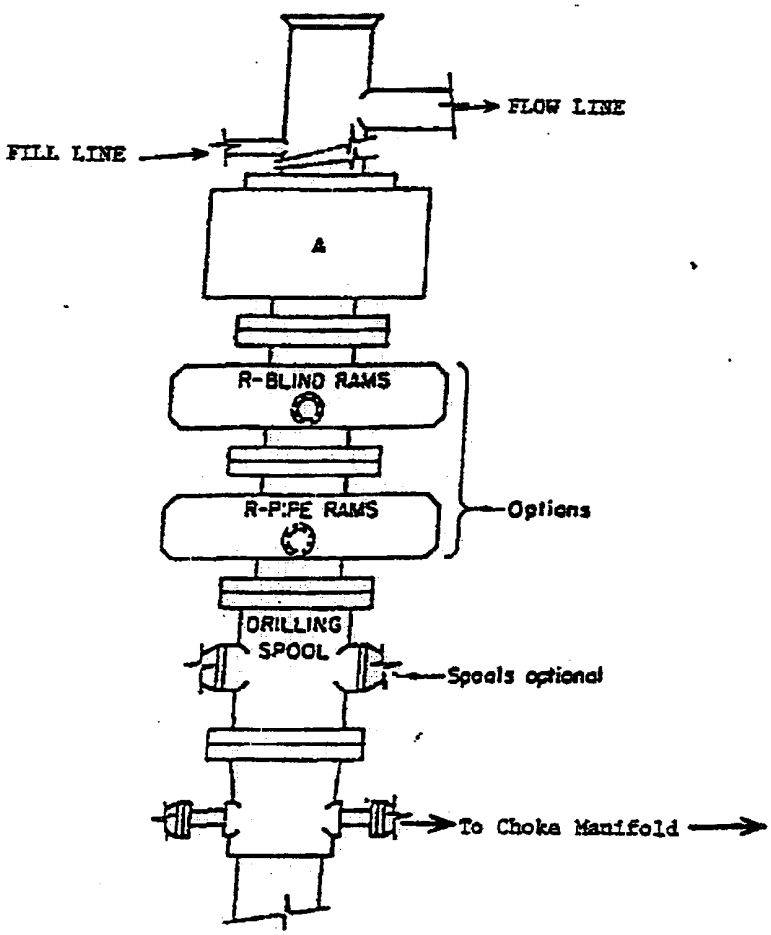
Exhibit C

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(505) 393-3117



- Wind Direction Indicators (wind sock or streamers)
- △ H2S Monitors (alarms at bell nipple and shale shaker)
- ○ Briefing Areas
- ○ Remote BOP Closing Unit
- □ Sign and Condition Flags

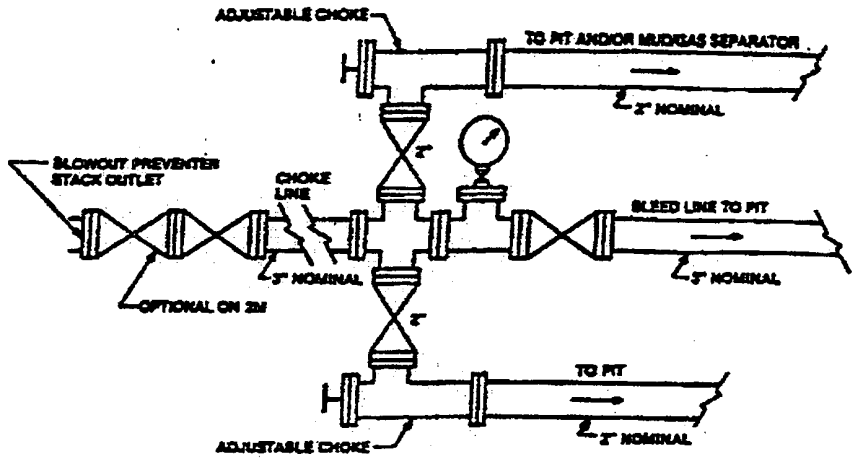
Exhibit D – Rig Layout Plan
Gruy Petroleum Management Co.
Rhodes Federal Unit No. 226
Unit G-Section 22-T26S-R37E 1980' FNL & 1550' FEL
Lea County, NM



ARRANGEMENT SRRA

900 Series
3000 PSI WP

Exhibit E – Blowout Preventor
Gruy Petroleum Management Co.
Rhodes Federal Unit No. 226
Unit G-Section 22-T26S-R37E
1980' FNL & 1550' FEL
Lea County, NM



Typical choke manifold assembly for 3M WP system

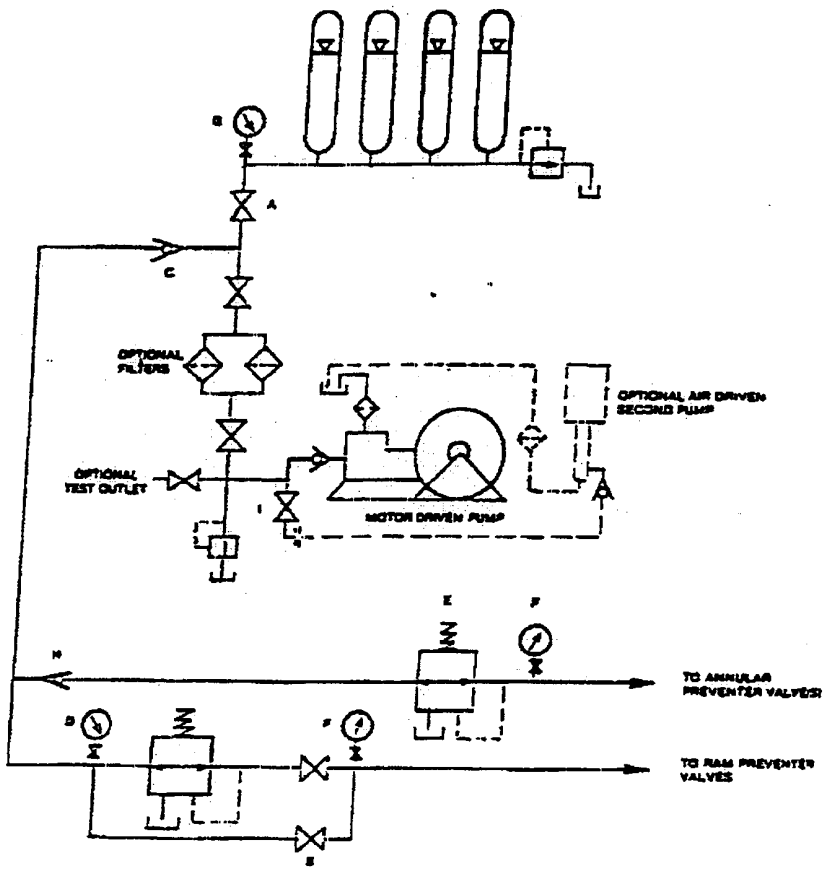


Exhibit E1 – Choke Manifold
Gruy Petroleum Management Co.
Rhodes Federal Unit No. 226
Unit G-Section 22-T26S-R37E 1980' FNL & 1550' FEL
Lea County, NM

Operator - Landowner Agreement

Company: Gruy Petroleum Management Co.

Proposed Well: Rhodes Federal Unit No. 226

Federal Lease Number: LC-030174-A

This is to advise that Gruy Petroleum Management Co. has an agreement with: D K Boyd Land and Cattle Company, P.O. Box 11351, Midland, TX 79702, the surface owner, concerning entry and surface restoration after completion of drilling operations at the above described well.

After abandonment of the well, all pits will be filled and levelled, and all equipment and trash will be removed from the well site. No other requirements were made concerning restoration of the well site.

6/7/2005
Date

Zeno Farris
Signature

Zeno Farris
Manager, Operations Administration

SPECIAL DRILLING STIPULATIONS

THE FOLLOWING DATA IS REQUIRED ON THE WELL SIGN

Operator's Name Gruy Petroleum Management Co. Well Name & No. Rhodes Federal Unit #226
Location 1980 F N L & 1550 F E L Sec. 22, T. 26 S, R 37 E.
Lease No. LC-030174-A County Lea State New Mexico

The Special stipulations check marked below are applicable to the above described well and approval of this application to drill is conditioned upon compliance with such stipulations in addition to the General Requirements. The permittee should be familiar with the General Requirements, a copy of which is available from a Bureau of Land Management office. EACH PERMITTEE HAS THE RIGHT OF ADMINISTRATIVE APPEAL TO THESE STIPULATIONS PURSUANT TO TITLE 43 CRF 3165.3 AND 3165.4.

This permit is valid for a period of one year from the date of approval or until lease expiration or termination whichever is shorter.

I. SPECIAL ENVIRONMENT REQUIREMENTS

(X) Lesser Prairie Chicken (stips attached)
( ) San Simon Swale (stips attached)
( ) Flood plain (stips attached)
( ) Other

II. ON LEASE - SURFACE REQUIREMENTS PRIOR TO DRILLING

(X) The BLM will monitor construction of this drill site. Notify the (X) Carlsbad Field Office at (505) 234-5972 ( ) Hobbs Office (505) 393-3612, at least 3 working days prior to commencing construction.

(X) Roads and the drill pad for this well must be surfaced with 6 inches of compacted caliche.

( ) All topsoil and vegetation encountered during the construction of the drill site area will be stockpiled and made available for resurfacing of the disturbed area after completion of the drilling operation. Topsoil on the subject location is approximately _____inches in depth. Approximately _____cubic yards of topsoil material will be stockpiled for reclamation.

(X) Other.

III. WELL COMPLETION REQUIREMENTS

( ) A Communlitization Agreement covering the acreage dedicated to the well must be filed for approval with the BLM. The effective date of the agreement must be prior to any sales.

(X) Surface Restoration: If the well is a producer, the reserve pit(s) will be backfilled when dry, and cut-and-fill slopes will be reduced to a slope of 3:1 or less. All areas of the pad not necessary for production must be re-contoured to resemble the original contours of the surrounding terrain, and topsoil must be re-distributed and re-seeded with a drill equipped with a depth indicator (set at depth of ½ inch) with the following seed mixture, in pounds of Pure Live Seed (PLS), per acre.

( ) A. Seed Mixture 1 (Loamy Sites)
Side Oats Grama (*Bouteloua curtipendula*) 5.0
Sand Dropseed (*Sporobolus cryptandrus*) 1.0

( ) B. Seed Mixture 2 (Sandy Sites)
Sand Dropseed (*Sporobolus crptandrus)* 1.0
Sand Lovegrass (*Eragostis trichodes*) 1.0
Plains Bristlegrass (*Setaria magrostachya*) 2.0

( ) C. Seed Mixture 3 (Shallow Sites)
Side oats Grama (*Boute curtipendula*) 1.0

( ) D. Seed Mixture 4 (Gypsum Sites)
Alkali Sacaton (*Sporobollud airoides*) 1.0
Four-Wing Saltbush (*Atriplex canescens*) 5.0

(X) OTHER SEE ATTACHED SEED MIXTURE

Seeding should be done either late in the fall (September 15 - November 15, before freeze up, or early as possible the following spring to take advantage of available ground moisture.

( ) Other.

RESERVE PIT CONSTRUCTION STANDARDS

The reserve pit shall be constructed entirely in cut material and lined with 6 mil plastic.

Mineral material extracted during construction of the reserve pit may be used for development of the pad and access road as needed. Removal of any additional material on location must be purchased from BLM.

Reclamation: Reclamation of this type of deep pit will consist of pushing the pit walls into the pit when sufficiently dry to support track equipment. The pit liner is NOT TO BE RUPTURED to facilitate drying; a ten month period after completion of the well is allowed for drying of the pit contents.

The pit area must be contoured to the natural terrain with all contaminated drilling mud buried with at least 3 feet of clean soil. The reclaimed area will then be seeded as specified in this permit.

OPTIONAL PIT CONSTRUCTION STANDARDS

The reserve pit may be constructed in predominantly fill material if:

(1) Lined as specified above and

(2) A borrow/caliche/gravel pit can be constructed immediately adjacent to the reserve pit and it capable of containing all reserve pit contents. The mineral material removed in the process can be used for pad and access road construction. However, a material sales contract must be purchased from the BLM prior to removal of the material.

Reclamation of the reserve pit consists of bulldozing all reserve pit contents and contaminants into the borrow pit and covering with a minimum of 3 feet of clean soil material. The entire area must be recontoured, all trash removed, and reseeded as specified in this permit.

CULTURAL

Whether or not an archaeological survey has been completed and notwithstanding that operations are being conducted as approved, the lessee/operator/grantee shall notify the BLM immediately if previously unidentified cultural resources are observed during surface disturbing operations. From the time of the observation, the lessee/operator/grantee shall avoid operations that will result in disturbance to these cultural resources until directed to processed by BLM.

TRASH PIT STIPS

All trash, junk, and other waste material shall be contained in trash cages or bins to prevent scattering and will be removed and deposited in an approved sanitary landfill. Burial on site is not permitted.

EXHIBIT B

BLM Serial No.: LC-030174-A
Company Reference: Gruy Petroleum

Seed Mixture for LPC Sand/Shinnery Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law(s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Plains Bristlegrass	5lbs/A
Sand Bluestem	5lbs/A
Little Bluestem	3lbs/A
Big Bluestem	6lbs/A
Plains Coreopsis	2lbs/A
Sand Dropseed	1lbs/A
**Four-winged Saltbush	5lbs/A

* This can be used around well pads and other areas where caliche cannot be removed.

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed

PRAIRIE CHICKENS

No surface use is allowed during the following time periods; unless otherwise specified, this stipulation does not apply to operation and maintenance of production facilities.

On the following lands: All of Section 22 T. 26 S., R. 37 E.

For the purpose of: Protecting Prairie Chickens:

Drilling for oil and gas, and 3-D geophysical exploration operations will not be allowed in Lesser Prairie Chicken Habitat during the period of March 15 through June 15, each year. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, geophysical exploration other than 3-D operations, and pipeline, road, and well pad construction, will be allowed except between 3:00 a.m. and 9:00 a.m. The 3:00 a.m. and 9:00 a.m. restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during the period. Additionally, no new drilling will be allowed within up to 200 meters of leks know at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Gruy Petroleum Management Company
Well Name & No: Rhodes Federal Unit No. 226
Location: Surface 1980' FNL & 1550' FEL, Sec.22, T. 26 S. R. 37 E.
Lease: NMLC 030174-A
Lea County, New Mexico

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at the Roswell Field Office, 2909 West Second St., Roswell, NM 88201, (505) 627-0272 for wells in Chaves and Roosevelt Counties; the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (505) 361-2822 for wells in Eddy County; and the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (505) 393-3612 for wells in Lea County, in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 8 ⅝ inch 5 ½ inch

C. BOP Tests

2. A Hydrogen Sulfide (H2S) Drilling Plan shall be in operations three days or 500 feet prior to drilling into the Top of the Yates Formation estimated to be 2700 feet in depth.

3. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.

4. Submit a Sundry Notice (Form 3160-5, one original and five copies) for each casing string, describing the casing and cementing operations. Include pertinent information such as; spud date, hole size, casing (size, weight, grade and thread type), cement (type, quantity and top), water zones and problems or hazards encountered. The Sundry shall be submitted within 15 days of completion of each casing string. The reports may be combined into the same Sundry if they fall within the same 15 day time frame.

5. The API No. assigned to the well by NMOCD shall be included on the subsequent report of setting the first casing string.

II. CASING:

1. The 8 ⅝ inch shall be set at **1050 Feet** with cement circulated to the surface. If cement does not circulate to the surface the appropriate BLM office shall be notified and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. The minimum required fill of cement behind the 5 ½ inch Production casing is to **circulate to surface.**

III. PRESSURE CONTROL:

1. All BOP systems and related equipment shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2. The BOP and related equipment shall be installed and operational before drilling below the 8 ⅝ inch casing shoe and shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

2. Minimum working pressure of the blowout preventer and related equipment (BOPE) shall be **2 M psi.**

III. Pressure Control (continued):

3. The appropriate BLM office shall be notified in sufficient time for a representative to witness the test.

-The test shall be done by an independent service company
-The results of the test shall be reported to the appropriate BLM office.
-Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures.
-Use of drilling mud for testing is not permitted since it can mask small leaks.
-Testing must be done in safe workman-like manner. Hard line connections shall be required.
-Both low pressure and high pressure testing of BOPE is required.

BLM Serial Number: LC-030174-A
Company Reference: Gruy Petroleum
Well No. & Name: Rhodes Federal Unit #226

STANDARD STIPULATIONS FOR PERMANENT RESOURCE ROADS
CARLSBAD FIELD OFFICE

A copy of the grant and attachments, including stipulations and map, will be on location during construction. BLM personnel may request to view a copy of your permit during construction to ensure compliance with all stipulations.

The holder/grantee/permittee shall hereafter be identified as the holder in these stipulations. The Authorized Officer is the person who approves the Application for Permit to Drill (APD) and/or Right-of-Way (ROW).

GENERAL REQUIREMENTS

A. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

B. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976, as amended (15 U.S.C. 2601, *et. seq.*) with regard to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized by this grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation and Liability Act, Section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the Authorized Officer concurrent with the filing of the reports to the involved Federal agency or State government.

C. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, *et. seq.* or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, *et. seq.*) on the right-of-way (unless the release or threatened release is wholly unrelated to the right-of-way holder's activity on the right-of-way). This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

D. If, during any phase of the construction, operation, maintenance, or termination of the road, any oil or other pollutant should be discharged, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil of other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages to Federal lands resulting there from, the Authorized Officer may take such measures as deemed necessary to control and cleanup the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any liability or responsibility.

E. The holder shall minimize disturbance to existing fences and other improvements on public domain surface. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times.

The holder will make a documented good-faith effort to contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence.

F. The Holder shall ensure that the entire right-of-way, including the driving surface, ditching and drainage control structures, road verges and any construction sites or zones, will be kept free of the following plant species: Malta starthistle, African rue, Scotch thistle and salt cedar.

Holder agrees to comply with the following stipulations:

1. ROAD WIDTH AND GRADE

The road will have a driving surface of 14 feet (all roads shall have a minimum driving surface of 12 feet, unless local conditions dictate a different width). The maximum grade is 10 percent unless the box below is checked. Maximum width of surface disturbance from construction will be 30 feet.

/__/ Those segments of road where grade is in excess of 10% for more than 300 feet shall be designed by a professional engineer.

2. CROWNING AND DITCHING

Crowning with materials on site and ditching on one side of the road on the uphill side will be required. The road cross-section will conform to the cross section diagrams in Figure 1. If conditions dictate, ditching may be required for both sides of the road; if local conditions permit, a flat-bladed road may be considered (if these conditions exist, check the appropriate box below). The crown shall have a grade of approximately 2% (i.e., 1" crown on a 12' wide road).

/_X_/ Ditching will be required on both sides of the roadway as shown on the attached map or as staked in the field.

/__/ Flat-blading is authorized on segment(s) delineated on the attached map.

3. DRAINAGE

Drainage control shall be ensured over the entire road through the use of borrow ditches, outsloping, insloping, natural rolling topography, lead-off (turnout) ditches, culverts, and/or drainage dips.

A. All lead-off ditches shall be graded to drain water with a 1 percent minimum to 3 percent maximum ditch slope. The spacing interval for lead-off ditches shall be determined according to the following table, but may be amended depending upon existing soil types and centerline road slope (in %):

SPACING INTERVAL FOR TURNOUT DITCHES

Percent slope	Spacing interval
0% - 4%	400' - 150'
4% - 6%	250' - 125'
6% - 8%	200' - 100'
8% - 10%	150' - 75'

A typical lead-off ditch has a minimum depth of 1 foot below and a berm 6 inches above natural ground level. The berm will be on the down-slope side of the lead-off ditch. The ditch end will tie into vegetation whenever possible.

For this road the spacing interval for lead-off ditches shall be at

/_x_/ 400 foot intervals.

/__/ _____ foot intervals.

/__/ locations staked in the field as per spacing intervals above.

/__/ locations delineated on the attached map.

B. Culvert pipes shall be used for cross drains where drainage dips or low water crossings are not feasible. The minimum culvert diameter must be 18 inches. Any culvert pipe installed shall be of sufficient diameter to pass the anticipated flow of water. Culvert location and required diameter are shown on the attached map (Further details can be obtained from the Roswell District Office or the appropriate Resource Area Office).

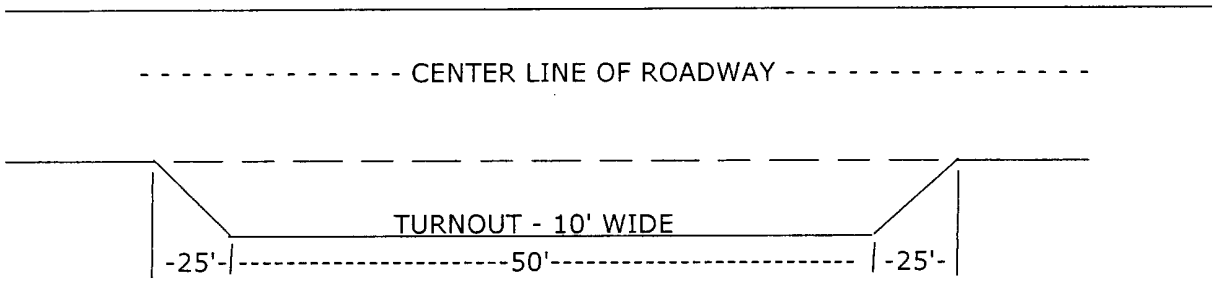
C. On road slopes exceeding 2%, drainage dips shall drain water into an adjacent lead-off ditch. Drainage dip location and spacing shall be determined by the formula:

spacing interval = $\frac{400'}{\text{road slope in \%}}$ + 100'

Example: 4% slope: spacing interval = $\frac{400}{4}$ + 100 = 200 feet

4. TURNOUTS

Unless otherwise approved by the Authorized Officer, vehicle turnouts will be required. Turnouts will be located at 2000-foot intervals, or the turnouts will be intervisible, whichever is less. Turnouts will conform to the following diagram:



STANDARD TURNOUT - PLAN VIEW

5. SURFACING

Surfacing of the road or those portions identified on the attached map may, at the direction of the Authorized Officer, be required, if necessary, to maintain traffic within the right-of-way with caliche, gravel, or other surfacing material which shall be approved by the Authorized Officer. When surfacing is required, surfacing materials will be compacted to a minimum thickness of six inches with caliche material. The width of surfacing shall be no less than the driving surface. Prior to using any mineral materials from an existing or proposed Federal source, authorization must be obtained from the Authorized Officer.

A sales contract for the removal of mineral materials (caliche, sand, gravel, fill dirt, etc.) from an authorized pit, site, or on location must be obtained from the BLM prior to using any such mineral material from public lands. Contact the BLM solid minerals staff for the various options to purchase mineral material.

6. CATTLEGUARDS

Where used, all cattleguard grids and foundation designs and construction shall meet the American Association of State Highway and Transportation Officials (AASHTO) Load Rating H-20, although AASHTO U-80 rated grids shall be required where heavy loads (exceeding H-20 loading), are anticipated (See BLM standard drawings for cattleguards). Cattleguard grid length shall not be less than 8 feet and width of not less than 14 feet. A wire gate (16-foot minimum width) will be provided on one side of the cattleguard unless requested otherwise by the surface user.

7. MAINTENANCE

The holder shall maintain the road in a safe, usable condition. A maintenance program shall include, but not be limited to blading, ditching, culvert installation, culvert cleaning, drainage installation, cattleguard maintenance, and surfacing.

8. PUBLIC ACCESS

Public access along this road will not be restricted by the holder without specific written approval being granted by the Authorized Officer. Gates or cattleguards on public lands will not be locked or closed to public use unless closure is specifically determined to be necessary and is authorized in writing by the Authorized Officer.

9. CULTURAL RESOURCES

Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on the holder's behalf, on public or Federal land shall be immediately reported to the authorized officer. The holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to the proper mitigation measures will be made by the authorized officer after consulting with the holder.

10. SPECIAL STIPULATIONS:

District I
1625 N. French Dr. Hobbs, NM 88240
District II
1301 W. Grand Avenue Artesia NM 88210
District III
1000 Rio Brazos Road Aztec, NM 87410
District IV
1220 S St Francis Dr. Santa Fe NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St Francis Dr.
Santa Fe, NM 87505

Form C-144
March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒
Type of action: Registration of a pit or below-grade tank ☒ Closure of a pit or below-grade tank ☐

Operator: Gruy Petroleum Management Co. Telephone: 972-443-6489 e-mail address: zfarris@magnumhunter.com
Address: P.O. Box 140907, Irving, Tx 75014-0907
Facility or well name: Rhodes Federal Unit No. 226 API #: 30-025-37414 U/L or Qtr/Qtr G Sec 22 T 26S R 37E
County: Lea Latitude 320149.52N Longitude 1030848.50W NAD: 1927 ☒ 1983 ☐ Surface Owner Federal ☐ State ☐ Private ☐ Indian ☐

Pit	Below-grade tank	
Type: Drilling ☒ Production ☐ Disposal ☐ Workover ☐ Emergency ☐ Lined ☒ Unlined ☐ Liner type: Synthetic ☒ Thickness 12 mil Clay ☐ Volume _____ bbl	Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not explain why not.	
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet (100 feet or more)	(20 points) (10 points) (0 points)
Wellhead protection area: (Less than 200 feet from a private domestic water source or less than 1000 feet from all other water sources.)	Yes (No)	(20 points) (0 points)
Distance to surface water: (horizontal distance to all wetlands playas irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more but less than 1000 feet (1000 feet or more)	(20 points) (10 points) (0 points)
	Ranking Score (Total Points)	-0-

If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks (2) Indicate disposal location: onsite ☐ offsite ☐ If offsite name of facility_____ (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☐ Yes ☐ If yes, show depth below ground surface_____ft. and attach sample results (5) Attach soil sample results and a diagram of sample locations and excavations

I hereby certify that the information above is true and complete to the best of my knowledge and belief **I further certify that the above-described 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 ☐.**
Date: 07-01-05

Printed Name/Title Zeno Farris Manager Operations Administration Signature Zeno Farris

Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state or local laws and/or regulations

Approval:
Date: AUG 18 2005
Printed Name/Title ORIGINAL SIGNED BY PAUL F. KAUTZ PETROLEUM ENGINEER Signature