N.M. Oil Cons. DIV-Dist. 2 FORM APPROVED Form 3160-3 1301 W. CHAHUTAVENTIE OMB NO. 1004-0136 **UNITED STATES** (July 1992) DEPARTMENT OF THE INTERACTION NO. 188210 Expires: February 28, 1995 5. LEASE DESIGNATION AND SERIAL NO. NM 14124 6. IF INDIAN, ALLOTTES OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL OR DEEPEN 1a. TYPE OF WORK DRILL X DEEPEN 7. UNIT AGREEMENT NAME 16. TYPE OF WELL GAS SINGLE MULTIPLE OIL ZONE WEL 8. FARM OR LEASE NAME, WELL NO. OTHER ZONE 2. NAME OF OPERATOR Marquardt 1 Penn Federal No.1 Gruy Petroleum Management Co. 9. API WELL NO. 3. ADDRESS AND TELEPHONE NO. 30-015 -33457 P.O. Box 140907 Irving TX 75014 972-401-3111 10. FIELD AND POOL, OR WILDCAT 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*) White City; Penn RECEIVED 11. SEC. T., R., M., BLOCK AND SURVEY OR AREA 2100' FSL & 1850' FEL Section 1-25S-26E JUN 0 9 2004 Sec. 1 T25S R26E 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE OPP APTEQIA 12 COUNTY OR PARISH 13. STATE 17 miles South of Carlsbad Eddy NM 15. DISTANCE FROM PROPOSED*
LOCATION TO NEAREST 16. NO. OF ACRES IN LEASE 17. NO. OF ACRES ASSIGNED TO THIS WELL PROPERTY OR LEASE LINE, T.O. 1850' 640 1280 (Also to nearest drig. unit line, if any) 18. DISTANCE FROM PROPOSED LOCATIONS 19. PROPOSED DEPTH 20. ROTARY OR CABLE TOOLS TO NEAREST WELL, DRILLING COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. NA 13000' Rotary 21. ELEVATIONS (Show whether DF, RT, GR, etc.) 22. APPROX. DATE WORK WILL START CARLSBAD CONTROLLED WATER BASIN 07-15-04 3322' GR PROPOSED CASING AND CEMENTING PROGRAM SIZE OF HOLE GRADE, SIZE OF CASING **WEIGHT PER FOOT** SETTING DEPTH QUANTITY OF CEMENT J-55 13 3/8" WITNESS 17-1/2" 54.5 # 400' 490 sx circulate J-55 9 5/8" 12 1/4" 40 # 1900' 1500 sx circulate 8 3/4" P-110 7" 10000 26# 950 sx circulate P-110 4 1/2" liner 11.6 # 9500' - 13000' 160 sx TOC 9500

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.

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 03-1-04 TITLE SIGNED Mgr. Ops. Admin DATE /This space for Federal or State office use PERMIT No. APPROVAL DATE t or certify that the applicant holds legal or equitable title to those rights in the sub Application approval uposition and the conditions of approval, if any sold and sold approval is any sold and sold approval is a sold and sold approval uposition and sold MUN 2004 FIELD MANAGER TITLE DATE

*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 SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

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

Form C-144 March 12, 2004

Pit or Below-Grade Tank Registration or Closure

Is not or below-grade tank covered by a "general plan"? Yes \(\subseteq \) No \(\subseteq \)

Type of action: Registration of a pit of	or below-grade tank \(\overline{\ove	ade tank
Operator: Gruy Petroleum Management Co. Telephone: 9 Address: P.O. Box 140907, Irving, Tx 75014-0907	272_443_6489e-mail address: zfarris@magnumhun	ter.com
	U/L or Qtr/Qtr J Sec_1 T	25S R 26E
	434.19 W NAD: 1927 ⊠ 1983 ☐ Surface C	
Pit	Below-grade tank	
[ype: Drilling ☑ Production ☐ Disposal ☐	Volume:bbl Type of fluid:	
Workover	Construction material:	_
Lined X Unlined	Double-walled, with leak detection? Yes 🔲 If n	ot, explain why not.
Liner type: Synthetic ☑ Thickness 12 mil Clay ☐ Volumebbl		
2. At the manual control function distance from house of sixty and think	Less than 50 feet	(20 points)
Depth to ground water (vertical distance from bottom of pit to seasonal high	50 feet or more, but less than 100 feet	(10 points)
water elevation of ground water.)	100 feet or more	(0 points) RECEIVED
Wellhead protection area: (Less than 200 feet from a private domestic	Yes	(20 points) JUN 0 9 2004
water source, or less than 1000 feet from all other water sources.)	(No)	(0 points)
water source, or rest train an outer water sources,		OOD:ARTESIA
Distance to surface water: (horizontal distance to all wetlands, playas,	Less than 200 feet	(20 points)
rrigation canals, ditches, and perennial and ephemeral watercourses.)	200 feet or more, but less than 1000 feet	(10 points)
	1000 feet or more	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) Indic	ate disposal location:
onsite Offsite If offsite, name of facility	• • •	•
date. (4) Groundwater encountered: No 🗆 Yes 🗀 If yes, show depth belo		
diagram of sample locations and excavations.	ri and anden samp	te results. (b) Attach son sample results and a
[hereby certify that the information above is true and complete to the best of been/will be constructed or closed according to NMOCD guidelines A, a Date: 7-08-04	general permit [], or an (attached) alternative O	CD-approved plan .
Printed Name/Title Zeno Farris Manager Operations Administration	_Signature _ Lind - an	
Your certification and NMOCD approval of this application/closure does not otherwise endanger public health or the environment. Nor does it relieve the regulations.	relieve the operator of liability should the contents o	f the pit or tank contaminate ground water or
Approval UN: 9 2004 Sep Printed Name/Title	Signature	
į	des	



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 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.:

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.

-eno

Name: Zeno Farris

Title: Manager, Operations Administration

Date: 03/01/04

Application to Drill

Gruy Petroleum Management Co. Marquardt 1 Penn Federal No. 1 Unit Letter J Section 1 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:

2100' FSL & 1850' FEL Sec. 1- 25S 26E

2 Elevation above sea level:

GR 3322'

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	250'	Cisco Canyon	9928
B/Salt	800'	Strawn	10078
Delaware	1450	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"	0-400'	13 3/8"	54.5	8-R	ST&C	J-55	_
12 1/4"	0-1900'	9 5/8"	40	8-R	ST&C	J-55	
8 3/4"	0-10000'	7"	26	8-R	ST&C	P-110	
7"	9500' - 13000	4 1/2"	11.6	8-R	ST&C	P-110	

Application to Drill

Gruy Petroleum Management Co. Marquardt 1 Penn Federal No. 1 Unit Letter J Section 1 T25S - R26E Eddy County, NM

9 Cementing & Setting Depth:

ž~

13 3/8"	Surface	Set 400' of 13 3/8" J-55 54.5 ST&C casing. Cement with 490 Sx. Of Premium Plus cement + additives, circulate cement to surface.
9 5/8"	Intermediate	Set 1900' of 9 5/8" J-55 40# ST&C casing. Lead with 1000 Sx. of Interfill C Cement + additives, tail with with 500 Sx. Of Premium Plus + additives, circulate cement to surface.
7"	Intermediate	Set 10000' of 7" P-110 26# ST&C casing. Cement in two stages, first stage cement with 550 Sx. of Class Interfill H/Super H Cement + additives. Second stage cement with
4 1/2"	liner	400 Sx of Interfill H/Super H, circulate cement to surface Set 3500' of 4 1/2" P-110 11.6 # ST&C liner from 9500' to 13000'. Cement iwith 160 sx of Super H. TOC 9500'.

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" & 7" 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 - 400'	8.4 - 8.6	30 - 32	May lose cire	Fresh water spud mud add paper to control seepage and high viscosity sweeps to clean hole.
400' - 1900'	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.
1900' - 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.

Application to Drill

Gruy Petroleum Management Co. Marquardt 1 Penn Federal No. 1 Unit Letter J Section 1 T25S - R26E Eddy County, NM

12 <u>Testing, Logging and Coring Program:</u>

- 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 or H2S gas are expected. 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 190.

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 <u>Strawn / Morrow / Atoka pay will be perforated and stimulated</u>. The well will be tested and potentialed as a gas well.

Gruy Petroleum Management Co. Marquardt 1 Penn Federal No. 1 Unit Letter J Section 1 T25S - R26E 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 Eddy County road # 722 and Eddy County Road # 742, go south 3.8 miles on County Road # 742 to a good caliche road on right. Go west 0.7 mile along caliche road to a road on the left. Go south 2.5 miles to a caliche road. Continue south .5 mile to a two track road on left. Go east .4
- 2 PLANNED ACCESS ROADS: 2184' of 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"

Gruy Petroleum Management Co.
Marquardt 1 Penn Federal No. 1
Unit Letter J Section 1
T25S - R26E 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.

Gruy Petroleum Management Co. Marquardt 1 Penn Federal No. 1 Unit Letter J Section 1 T25S - R26E Eddy County, NM

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 recountered 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.

Gruy Petroleum Management Co. Marquardt 1 Penn Federal No. 1 Unit Letter J Section 1 T25S - R26E Eddy County, NM

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. There are no known dwellings 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 exit; 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: Zero Fare

DATE: 3/1/04

TITLE: Manager, Operations Administration

DISTRICT I P.O. Box 1980, Hobbs, NM 88241-1980

State of New Mexico

Energy, Minerals and Natural Resources Department

Form C-102 Revised February 10, 1994 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

DISTRICT II

P.O. Drawer DD, Artesia, NM 88211-0719

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

DISTRICT IV P.O. BOX 2088, SANTA FE, N.M. 87504-2088

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe. New Mexico 87504-2088

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Code Pool Name			
		White City; Penn (Gas)			
Property Code	Property N	lame	Well Number		
	MARQUARDT 1 PE	NN FEDERAL	1		
OGRID No.	Operator Name		Elevation		
162683	GRUY PETROLEUM MAN	AGEMENT COMPANY	3322'		

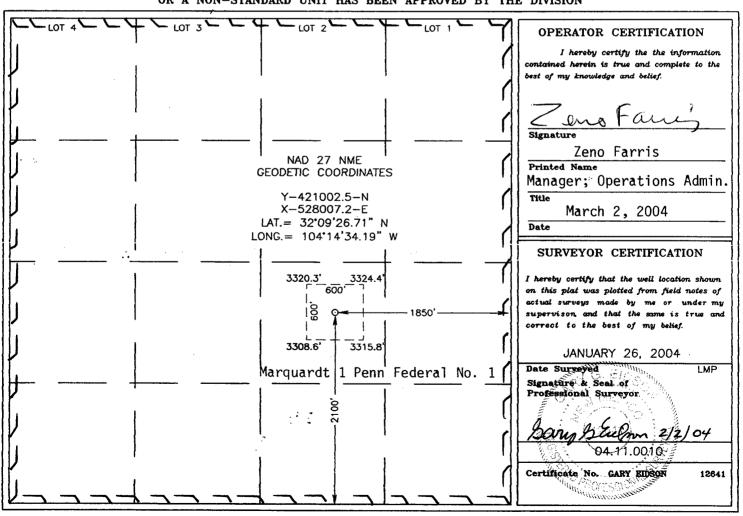
Surface Location

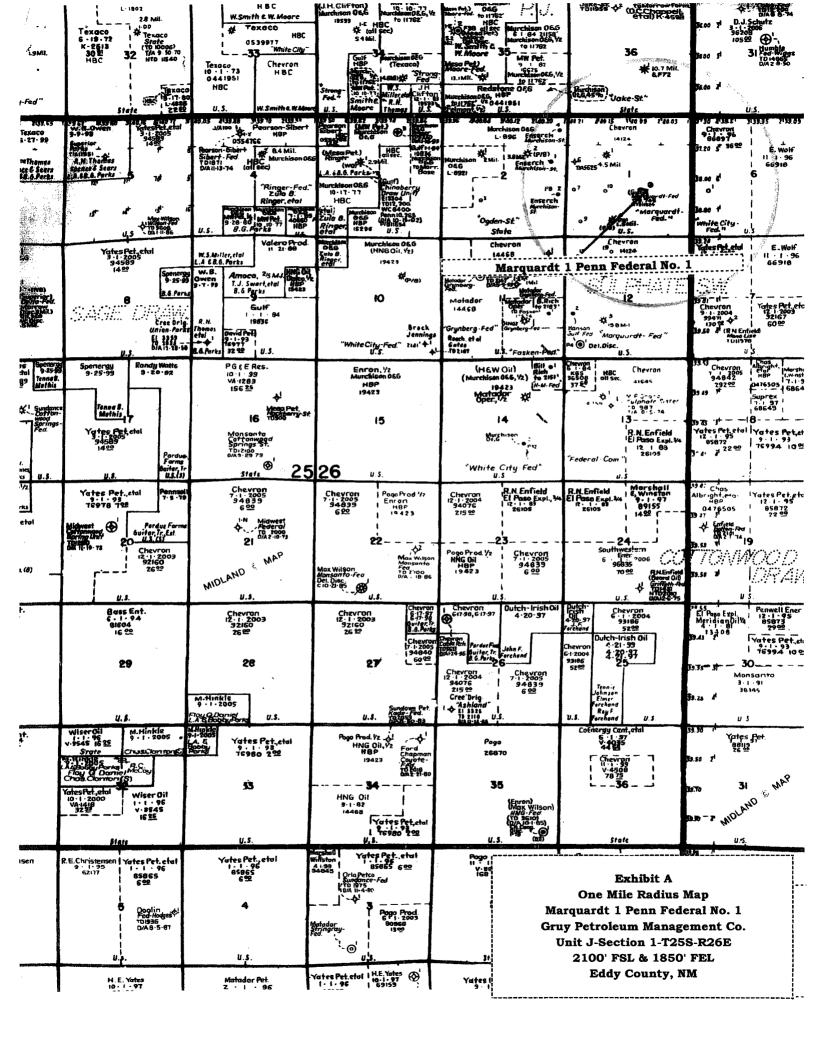
ſ	UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	J	1	25 S	26 E		2100	SOUTH	1850	EAST	EDDY

Bottom Hole Location If Different From Surface

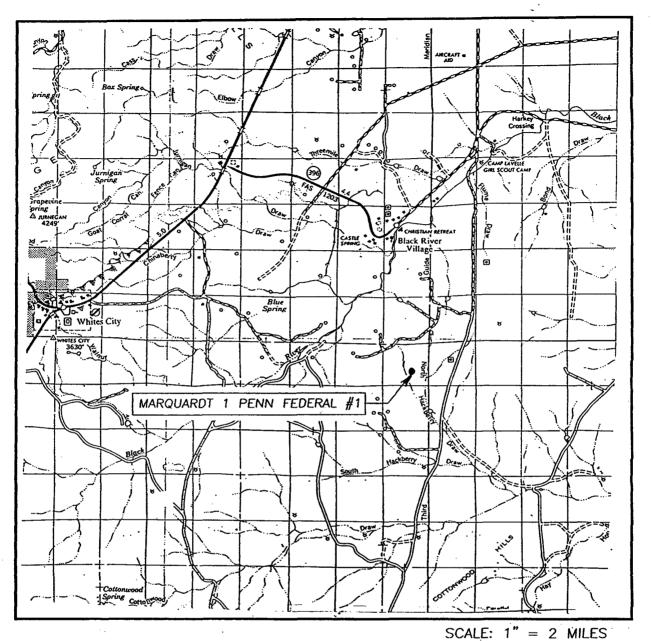
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint or	Infill Co	nsolidation (Code Or	der No.	·		<u> </u>	\
640.48	N			ì					

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





VICINITY MAP



SEC. 1 TWP. 25-S RGE. 26-E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 2100' FSL & 1850' FEL

ELEVATION 3322'

GRUY PETROLEUM

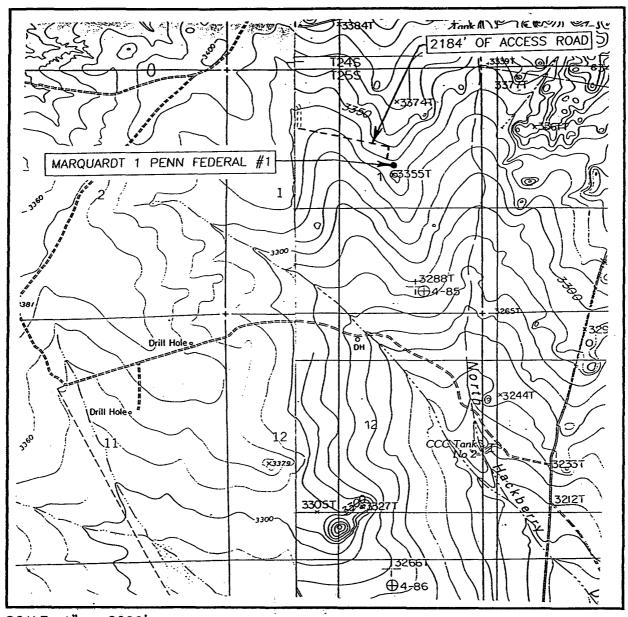
OPERATOR MANAGEMENT COMPANY

LEASE MARQUARDT 1 PENN FEDERAL

JOHN WEST SURVEYING HOBBS, NEW MEXICO (505) 393-3117



LOCATION VERIFICATION MAP

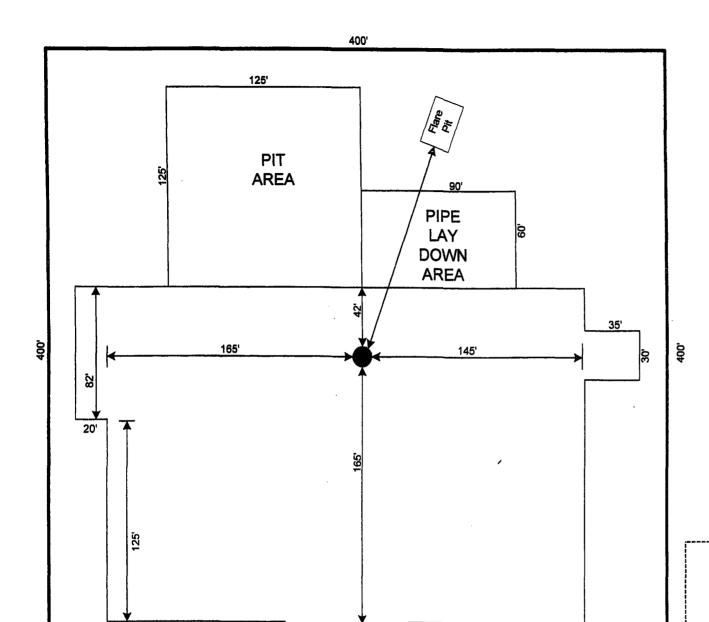


SCALE: 1" = 2000'

CONTOUR INTERVAL: BOND DRAW, N.M. - 10'

SEC. 1 TWP. 25-S RGE. 26-E
SURVEY N.M.P.M.
COUNTY EDDY :
DESCRIPTION 2100' FSL & 1850' FEL
ELEVATION 3322'
GRUY PETROLEUM OPERATOR MANAGEMENT COMPANY
LEASE MARQUARDT 1 PENN FEDERAL
U.S.G.S. TOPOGRAPHIC MAP BOND DRAW, N.M.

JOHN WEST SURVEYING HOBBS, NEW MEXICO (505) 393-3117



RIG # 80

GRUY PETROLEUM MANAGEMENT COMPANY IRVING TEXAS

SCALE 1"=60"

Exhibit D
Rig Layout Plan
Marquardt 1 Penn Federal No. 1
Gruy Petroleum Management Co.
Unit J-Section 1-T25S-R26E
2100' FSL & 1850' FEL
Eddy County, NM

400'

20.

