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

1201 W SUBMICHOTE ANIBATEIA

Form 3160-3 (July 1992) UNI

FORM APPROVED OMB NO. 1004-0136

	100: AA. C	ALCELIO LA COMPONIO	OMID NO. 1004-0136
TED STATES	Artasia	N A Cothe Cathard Cathard Con	Expires: February 28, 19
IED STATES INT OF THE IN	ITERIOR "CA,	reverse side)	5. LEASE DESIGNATION AND SERIAL I
			NTN 4 1 4 1 0 4

	<u>-</u>	Anas	SIA. IVIMPORA	Theridale in	1	
DEPAI	RTMENT OF THE IN	5. LEASE DESIGNATION A	ND SERIAL NO.			
BUR	EAU OF LAND MANAGE	MENT			NM 14124	
A F	DUCATION FOR REDUIT T	'A BBILL 65			6. IF INDIAN, ALLOTTES O	R TRIBE NAME
1a. TYPE OF WORK	PLICATION FOR PERMIT T	O DRILL OF	Y DEEPEN			
IN. THE OF WORK	DRILL X	DEEPEN			7. UNIT AGREEMENT NAI	ME
1b. TYPE OF WELL		SINCLE	MULTIPLE			
OIL { WELL	J GAS (X) WELL OTHE	SINGLE R ZONE	MULTIPLE ZONE	لـــا	8. FARM OR LEASE NAM	E WELL NO
2. NAME OF OPERATOR	VIEL VIII	K ZONE	ZONL		- ]	
Gruy Petroleum	Management Co.				9. API WELL NO.	Penn Federal No.1
3. ADDRESS AND TELEPH	ONE NO.					2011
P.O. Bax 140907	Irving TX 75014 972-401-3111				30-015-1	33461
4. LOCATION OF WELL	(Report location clearly and in accordance with	h any State requirem	nents.*)		White City; Pen	
					11. SEC. T.,R.,M., BLOCK	
					OR AREA	AND SURVEY
880' FSL & 17	760' FEL Section 12-25S-26E				1	T25S R26E
14. DISTANCE IN MILES AND D	RECTION FROM NEAREST TOWN OR POST OFFIC	:E*			12. COUNTY OR PARISH	13. STATE
17 miles South o	f Carlsbad				Eddy	NM
15. DISTANCE FROM PROP		16. NO. OF ACE	RES IN LEASE		OF ACRES ASSIGNED	RECEIVED
PROPERTY OR LEASE	SE LINE, T.O			TO THIS Y		
(Also to nearest drig. unit	line, if any)	12	80		640	JUN 0 9 2004
18. DISTANCE FROM PROP			19. PROPOSED DEPTH	20.	ROTARY OR CABLE TOOLS	OOD ARTESIA
OR APPLIED FOR, ON	DRILLING COMPLETED, I THIS LEASE, FT.					* ************************************
		NA	13000'		Rotary	
21. ELEVATIONS (Show whe	other DF, RT, GR, etc.) CARLSB 54' GR	AD CONTRO	L DLLED WATER BA	SIN	22. APPROX. DATE WORK 07-15-04	(WILL START*
23	PROPOSED CA	SING AND CEN	MENTING PROGRAM			
SIZE OF HOLE	GRADE, SIZE OF CASING		HT PER FOOT		TING DEPTH	QUANTITY OF CEMENT
17-1/2"	J-55 13 3/8"	54.5#	•	40	0' WITNESS	490 sx circulate
12 1/4"	J-55 9 5/8"	40 #		19	00'	1500 sx circulate
8 3/4"	P-110 7"	26#		10	000'	950 sx circulate
7"	P-110 4 1/2" liner	11.6	#	9500	)' - 13000'	160 sx TOC 9500
	he surface pipe through the ru					
	• • • •	• •	_			•
	equesting a variance for the 13		_		=	
all casing strings be	elow the conductor, shall be p	ressure test	ed to .22 psi per f	oot or 1	1500 # whichever is	s greater, but not to
exceed 70% of the	manufactures stated maximu	ım internal y	ield. During the r	unning	of the surface pipe	and the drilling of
the intermediate he	ole we do not anticipate any p	ressures gre	eater than 1000 #	and ar	e requesting a vari	ance to test the
13 3/8" casing and	BOP system to 1000 # psi, ar	nd use rig pu	ımps instead of ar	n indep	endent service con	npany.
•	ESCRIBE PROPOSED PROGRAM: pen directionally, give pertinent data on sub-				ictive zone and proposed no	
24	Zono Fan				•	03-1-04
SIGNED	237501 66665	TITLE	Mgr. Ops. Admin		DATE	
PERMIT No.	ffice use)		APPROVAL	DATE_		
Application approval does not was CONDITIONS OF APPRO	ment or certify that the applicant holds legal or equitable t	itle to those rights in the	subject lease which would entitle	the applicant	to conduct operations thereon.	W
ADDBOVED BY	/s/Teclic A TL	TITI E	THE TO MAN	NTA CI	ED DATE	- 7 JUN 2004

\*See Instructions On Reverse Side

TITLE FIELD MANAGER

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

APPROV

**GENERAL REQUIREMENTS** AND SPECIAL STIPULATIONS **ATTACHED** 

APPROVED BY

/s/ Leslie A.

APPROVAL FOR 1 YEAR

DATE

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-Gra	de Tank Registration or Clock covered by a "general plan"? Yes	sure No 🔀	
Type of action: Registration of a pit of	or below-grade tank Closure of a pit or below	v-grade tank	
Address: P.O. Box 140907, Irving, Tx 75014-0907  Pacility or well name: Marquardt 12 Penn Federal # 1AP1 #:	U/L or Qtr/Qtr O Sec 12  NAD: 1927 ★ 1983 ☐ Surface	T 25S R 26E	te 🗌 Private 🔲 Indian 🔲
Pit  [ype: Drilling   Production   Disposal    Workover   Emergency    Lined   Unlined    Liner type: Synthetic   Thickness   12 mil   Clay   Volume   bbl	Below-grade tank   Volume:bbl Type of fluid:   Construction material:   Double-walled, with leak detection? Yes		
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)	RECEIVED
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)	JUN 0 9 71114 OPEARTESIA
Distance to surface water: (horizontal distance to all wetlands, playas, rrigation 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 onsite	(3) Attach a general description of remedial	action taken including r	emediation start date and en
I 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 Date: 7-08-04  Printed Name/Title Zeno Farris Manager Operations Administration  Your certification and NMOCD approval of this application/closure does not otherwise endanger public health or the environment. Nor does it relieve the regulations.	general permit , or an (attached) alternative  Signature  Curio Curio  relieve the operator of liability should the content	ts of the pit or tank conta	
Approvature 9 2004  Date:  Printed Name/Title	_Signature		



## Gruy Petroleum Management Co.

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

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

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

## STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

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

Attn: Ms. Linda Askwig

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

Lease No.:

NM - 14124

Legal Description:

All Sec 12, T25S-R26E

Containing 640 acres, Eddy County New Mexico

Formation (S):

Morrow/Pennsylvanian

Bond Coverage:

Nationwide BLM Bond

BLM Bond File No.: NM 2575

Authorized Signature:

Representing Gruy Petroleum Management Co.

Name: Zeno Farris

Title: Manager, Operations Administration

Date: 03/01/04

## **Application to Drill**

Gruy Petroleum Management Co. Marquardt 12 Penn Federal No. 1 Unit Letter O Section 12 T25S - R26E Eddy County, NM

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

1 Location:

880' FSL & 1760' FEL Sec. 12-25S 26E

4

2 Elevation above sea level:

GR 3254'

3 Geologic name of surface formation:

**Quaternery Alluvium Deposits** 

4 <u>Drilling tools and associated equipment:</u>

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	e 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	
7 7/8"	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 12 Penn Federal No. 1 Unit Letter O Section 12 T25S - R26E Eddy County, NM

#### 9 Cementing & Setting Depth:

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 400 Sx of Interfill H/Super H, circulate cement to surface.
4 1/2"	liner	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 circ	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	sepage 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 12 Penn Federal No. 1 Unit Letter O Section 12 T25S - R26E 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 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 12 Penn Federal No. 1 Unit Letter O Section 12 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 7.0 miles on County Road # 742 to a good caliche road on right. Go west 0.6 mile along caliche road and then northwest for 0.3 mile to new access road and .5 mile to location.
- 2 PLANNED ACCESS ROADS: 2374' 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 12 Penn Federal No. 1 Unit Letter O Section 12 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 12 Penn Federal No. 1 Unit Letter O Section 12 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 12 Penn Federal No. 1 Unit Letter O Section 12 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: 3/1/04

TITLE: Manager, Operations Administration

## 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 Name	
		White City; Penn (Gas)	
Property Code	Proper	ty Name	Well Number
	MARQUARDT 12	PENN FEDERAL	1
OGRID No.	Operato	or Name	Elevation
162683	GRUY PETROLEUM M.	ANAGEMENT COMPANY	3254'

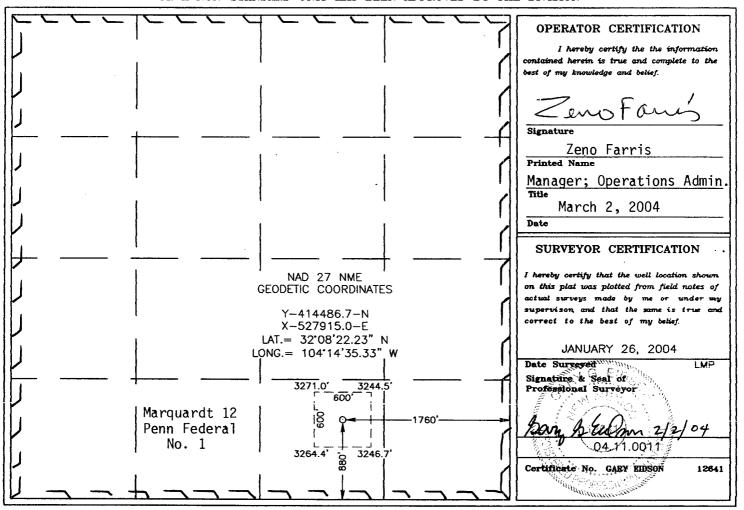
#### Surface Location

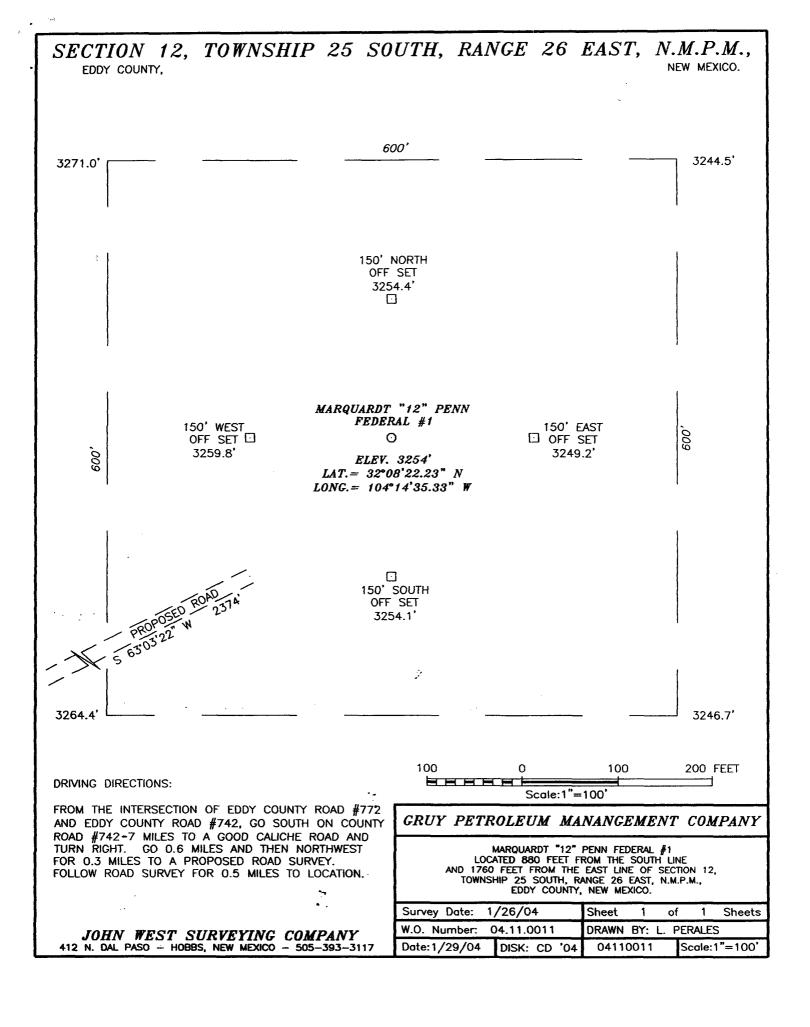
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	12	25 S	26 E		880	SOUTH	1760	EAST	EDDY

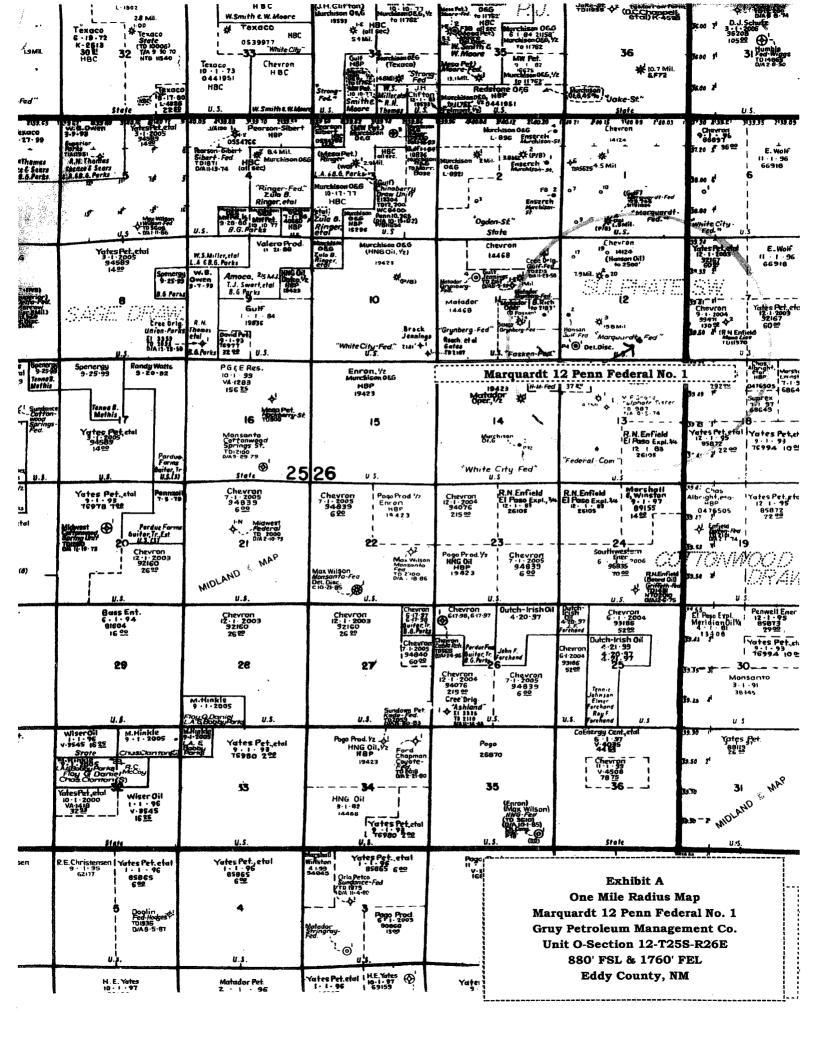
#### Bottom Hole Location If Different From Surface

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 o	r Infill	Consolidation (	Code Or	der No.		<u> </u>		
640	N								

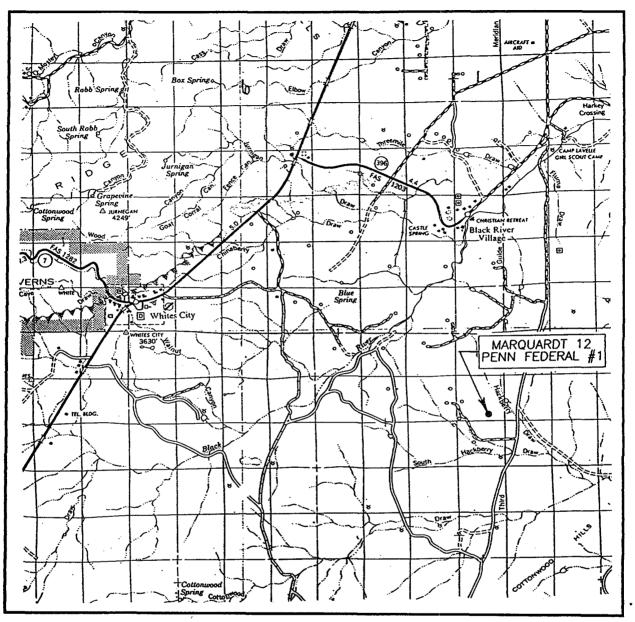
#### NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION







## VICINITY MAP

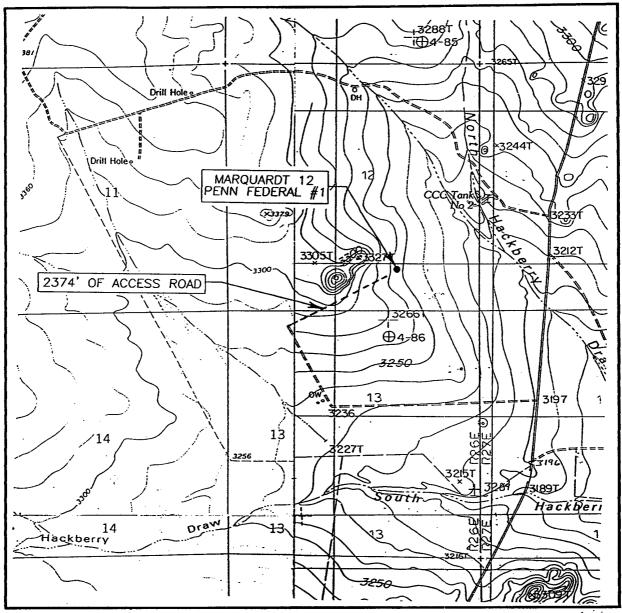


SCALE: 1" = 2 MILES

SEC. 12	TWP. <u>25-S</u> RGE. <u>26-E</u>
SURVEY	N.M.P.M.
COUNTY	EDDY
DESCRIPTION	N 880' FSL & 1760' FEL
ELEVATION_	3254'
OPERATOR_	GRUY PETROLEUM MANAGEMENT COMPANY
LEASE	MARQUARDT 12 PENN FEDERAL #1

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

# LOCATION VERIFICATION MAP



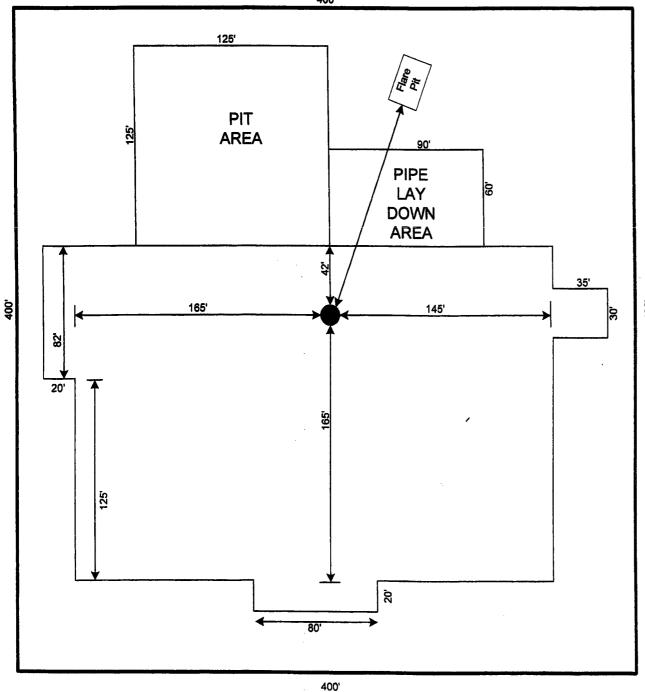
SCALE: 1" = 2000'

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

SEC. 12 1	WP. <u>25-S</u> RGE. <u>26-E</u>
SURVEY	N.M.P.M.
COUNTY	EDDY
DESCRIPTION	1880' FSL & 1760' FEL
ELEVATION_	3254'
OPERATOR_	GRUY PETROLEUM MANAGEMENT COMPANY
LEACE	MARQUARDT 12 PENN FEDERAL
LEASE	FEMIL LEDEIVAL
	POGRAPHIC 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 12 Penn Federal No. 1
Gruy Petroleum Management Co.
Unit O-Section 12-T25S-R26E
880' FSL & 1760' FEL
Eddy County, NM

