Form 3160-3 (July 1992)

Oil Cons.

FORM APPROVED OMB NO. 1004-0136

Expires: February 28, 1995

UNITED STATES 1301 W. Grand Avanue
DEPARTMENT OF THE INTERIORARIESIA, NIVE 88210
BUREAU OF LAND MANAGEMENT

5. LEASE DESIGNATION AND SERIAL NO 2964

BUR	EAU OF LAND MANAGEM	EIVI		141411417	10882
AF	PLICATION FOR PERMIT TO	DRILL OR DEEPEN		6. IF INDIAN, ALLOTTES OF	TRIBE NAME
1a. TYPE OF WORK				7. UNIT AGREEMENT NAM	F
16. TYPE OF WELL	DRILL X	DEEPEN			
OIL _	GAS X	SINGLE MULTIPLE		NMNM 10682 6. FARM OR LEASE NAME	
WELL 2. NAME OF OPERATOR	WELL OTHER	ZONE ZONE			
Gruy Petroleum	Management Co.			l	leral 5 Com No. 4
3. ADDRESS AND TELEPH	ONE NO.			9. API WELL NO. 30-015- 2	7111
P.O. Box 140907	Irving TX 75014 972-401-3111	RECEIVI	ED	10. FIELD AND POOL, OR 1	051/6 WILDCAT
4. LOCATION OF WELL	(Report location clearly and in accordance with a	ny State requirements.*) NOV 2 5 2	103	Tarkey Track; M	forrow North
		OCD-ART	ECIA	11. SEC. T.,R.,M., BLOCK	AND SURVEY
1980' FSL & 11	90' FEL	OCD-ANT	ESIA	OR AREA Sec. 5 T	18S R31E
6.2 miles Southea	RECTION FROM NEAREST TOWN OR POST OFFICE			12. COUNTY OR PARISH	
15. DISTANCE FROM PROP		16. NO. OF ACRES IN LEASE	17 NO OF	Eddy ACRES ASSIGNED	NM
LOCATION TO NEA	REST	10. NO. OF ACRES IN CEASE	TO THIS W		
PROPERTY OR LEA: (Also to nearest drig. unit	1100	160		320.04	
18. DISTANCE FROM PROP		19. PROPOSED DEPTH	20. 1	ROTARY OR CABLE TOOLS	
OR APPLIED FOR, OF				_	
	' 1713	12500'		Rotary	
21. ELEVATIONS (Show whe	ether DF, RT, GR, etc.) CAPITA	N CONTROLLED WATER BA	SIN	22. APPROX. DATE WORK 11-30-03	WILL START
23	PROPOSED CASI	NG AND CEMENTING PROGRAM	<u> </u>		——————————————————————————————————————
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETT	ING DEPTH	QUANTITY OF CEMENT
	SS J-55 13 3/8"	54.5 # WITNESS	425		490 sx circulate
12 1/4"	J-55 9 5/8"	40 #		0 4200 (553)	1200 sx circulate
7 7/8"	N-80/S-95 5 1/2"	17 #	125		1620 sx TOC 2700'
	ne surface pipe through the run	- ,		* * * *	·
system. We are re-	questing a variance for the 13 3	3/8" surface casing and BOP	testing	from Onshore Ord	er No. 2, which states
all casing strings be	low the conductor, shall be pre	ssure tested to .22 psi per fo	oot or 15	00 # whichever is	greater, but not to
exceed 70% of the	manufactures stated maximum	internal yield. During the ru	ınning of	the surface pipe a	and the drilling of
the intermediate ho	le we do not anticipate any pre	ssures greater than 1000#			
13 3/8" casing and I	BOP system with rig pumps to	1000 # psi.		OVAL SUBJE	
-		·		RAL REQUIR	
IN ABOVE CDACE D	ECODIDE DECEDOCED DECCEDAM.			SPECIAL STIP	
	ESCRIBE PROPOSED PROGRAM: pen directionally, give pertinent data on subsi	If proposal is to deepen, give data on pre inface locations and measured and true vo	stantiprodukt ertical depths	tive Forte and proposed new 5. Give blowout preventer p	w productive zone. program, if any.
SIGNED	Zeno Famis	TITLE Mgr. Ops. Admin		DATE	10-28-03
(This space for Federal or State of PERMIT No.	ffice use)	APPROVAL	DATE		
-	rant or certify that the applicant holds legal or equitable title			conduct operations thereon.	ברוני מחני
CONDITIONS OF APPRO	oval, if any: /s/ Joe G. Lara	FIELD MA	NAGI	ER DATE	2 1 Nuv 2003
		TITLE TABLE IVII			

*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.

Application to Drill

Gruy Petroleum Management Co.

Magnum Federal 5 Com 4

Unit Letter I Section 5

T18S - R31E 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:

1980' FSL & 1190' FEL Sec. 5 18S 29E

2 Elevation above sea level:

GR 3711'

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:

12500'

6 Estimated tops of geological markers:

T/Salt	250'	Wolfcamp	8700'
B/Salt	800'	Cisco Canyon	9700'
Yates	1050'	Strawn	9900'
Queen	1975'	Atoka	10450'
Grayburg	2350'	Morrow	10650'
San Andres	2815'	Mississipan	11400'

7 Possible mineral bearing formation:

Strawn Oil Atoka Gas Morrow Gas

8 Casing program:

 Hole Size	Interval	Casing OD	Weight	Thread	Collar	Grade	1
17 1/2"	0-425" S	75 · 13 3/8"	54.5	8-R	ST&C	J-55	_
12 1/4"	0-3200 4	200 <u>′</u> 9 5/8"	40	8-R	ST&C	J-55	
7 7/8"	0-7000' (-	200′ 9 5/8" 535) 5 1/2"	17	8-R	ST&C	N-80	
7 7/8"	7000'-12500	5 1/2"	17	8-R		P-110	

Application to Drill

Gruy Petroleum Management Co. Magnum Federal 5 Com 4 Unit Letter I Section 5 T18S - R31E Eddy County, NM

9 Cementing & Setting Depth:

		5761
13 3/8"	Surface	Set 425 of 13 3/8" J-55 54.5# ST&C casing. Cement with
		490 Sx. Of Class "C" cement + additives, circulate cement to
		surface.
		4200
9 5/8"	Intermediate	Set 3200' of 9 5/8" J-55 40# ST&C casing. Cement in two
		stages, first stage cement with 795 Sx. Of Class POZ/C
		Cement + additives, second stage cement with 200 Sx. Of
		Class "C" + additives, circulate cement to surface.
5 1/2"	Production	Set 12500' of 5 1/2" NP-80 / P-110 17# ST&C casing.
0 1/2	1 100000011	Cement with 1620 Sx. of Class POZ/C Cement + additives.
		Estimated top of cement 2700'.

10 Pressure control Equipment:

Exhibit "E". A 13 3/8" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000 # annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000'. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor. BOP unit will be hydraulically operated. BOP will be nippled up on the 9 5/8" casing and will be operated at least once a day while drilling and the blind rams will be operated when

11 Proposed Mud Circulating System:

	Depth	Mud Wt	Viscosity	Fluid Loss	Type Mud
		, 8.4 - 8.6	32 - 34	May lose circ.	Fresh water spud mud add paper to control seepage and high viscosity sweeps to clean hole.
	575-4200° 400'-3200'	9.7 - 10	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.
(355)	4200' 3200' - 8300'	8.4 - 9.9	28 - 29	NC	Fresh water. Paper for seepage. Lime for pH (9 - 9.5)
	8300' - 10000'	8.4 - 8.9	28 - 29	NC	Cut brine. Caustic for pH control.
	10000' - 12500'	8.9 - 9.7	32 - 34	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.

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Unit Letter I Section 5

T18S - R31E 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 3000 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 25 - 30 days. If production casing is run an additional 30 days will be required to complete and construct surface facilities.

15 Other Facets of Operations:

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

Gruy Petroleum Management Co.

Magnum Federal 5 Com 4

Unit Letter I Section 5

T18S - R31E 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 State road # 83 and County roud # 222 go South 2.1 miles. Turn and go West 0.2 miles on caliche road. Porposed location is 250' North.
- 2 PLANNED ACCESS ROADS: There is 88' feet of new access road planned.
- 3 LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A"

A. Water wells - None known
B. Disposal wells - None known Eastland Groupburg No. 3
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.

Magnum Federal 5 Com 4

Unit Letter I Section 5

T18S - R31E 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 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:

No camps or airstrips to be constructed.

Gruy Petroleum Management Co.
Magnum Federal 5 Com 4
Unit Letter I Section 5
T18S - R31E 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.

Magnum Federal 5 Com 4

Unit Letter I Section 5

T18S - R31E Eddy County, NM

11 OTHER INFORMATION:

- A. Topography consists of a 2% slope to the south, on the south side of a low sandy rise with re-worked red sandy paleosols soils. Vegatation is mainly native grasses, yucca, and an occasional mesquite and sandsage.
- B. The wellsite is on Federal owned surface. The surface is leased to Williams & Son Cattle Co. P.O. Box 30 Maljamar, NM 88264. They will notified of our intention to drill prior to any activity. The land is used mainly for cattle ranching and oil and gas production.
- C. An Archaeological survey has beev 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 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:	Zeno Faris
DATE:	10/28/03
TITLE:	Manager, Operations Administration



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.:

NMNM 91308

Legal Description:

E/2 Sec 5, T18S-R31E

Containing 320.00 acres, Eddy County New Mexico

Formation (S):

Strawn - Atoka - Morrow

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: 10/28/03

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

OIL CONSERVATION DIVISION

P.O. Box 2088

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 Santa Fe, New Mexico 87504-2088

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Paol Code	ol Code Pool Name		
		Turkey Track; Morrow	w North	
Property Code	Property Name MAGNUM 5 FEDE		Well Number 4	
OGRID No. 162683	Operator Name GRUY PETROLEUM MANA		Elevation 3711'	

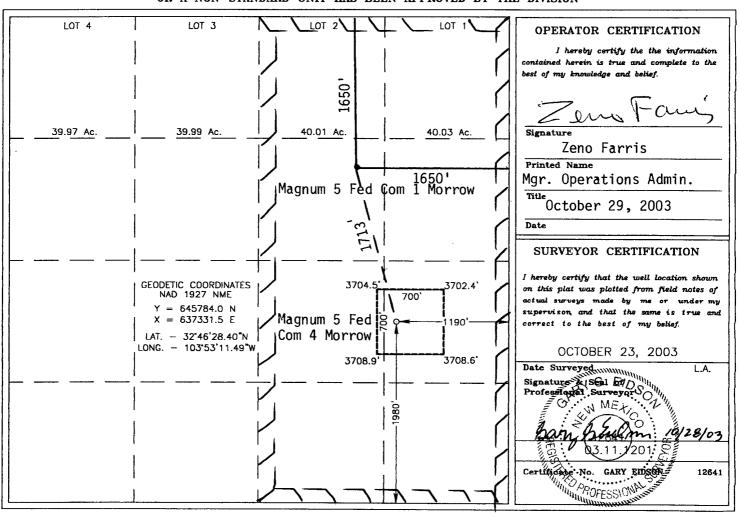
Surface Location

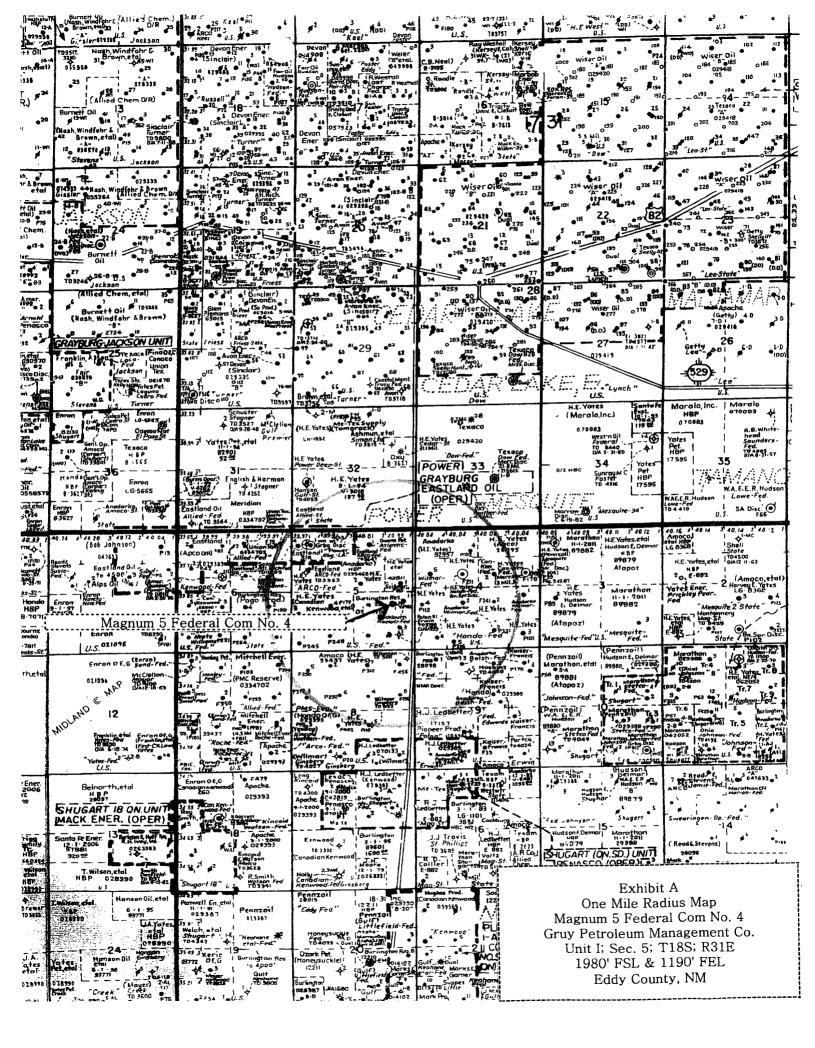
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
1	5	18-S	31-E		1980	SOUTH	ູ1190	EAST	EDDY

Bottom Hole Location If Different From Surface

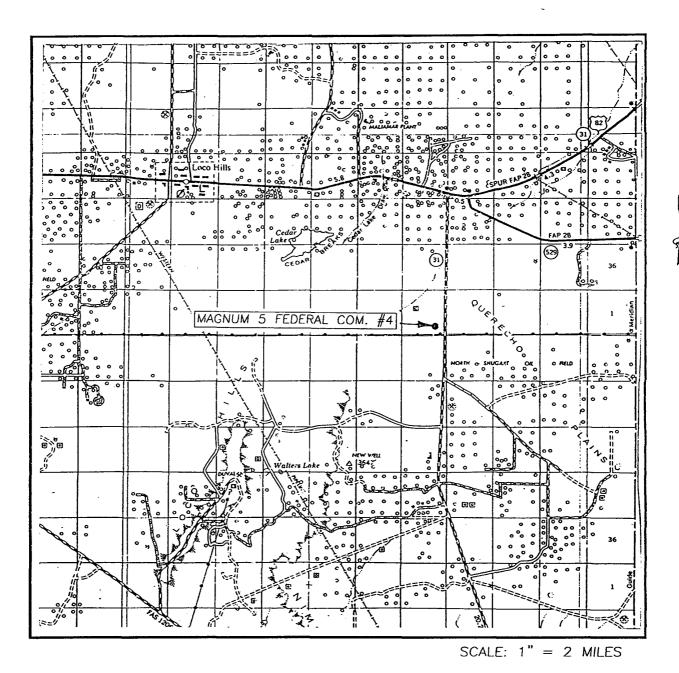
e North/South line Feet from the East/West line County
h

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. 5 TWP. 18—S RGE. 31—E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980' FSL & 1190' FEL

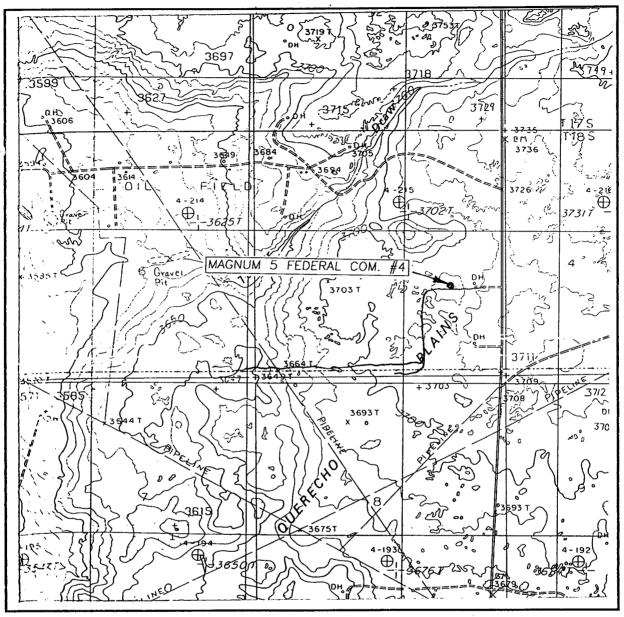
ELEVATION 3711'

OPERATOR GRUY PETROLEUM

LEASE MAGNUM 5 FEDERAL COM.

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

LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10' LOCO HILLS, N.M.

SEC. 5 TWP. 18—S RGE. 31—E

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION 1980' FSL & 1190' FEL

ELEVATION 3711'

OPERATOR GRUY PETROLEUM

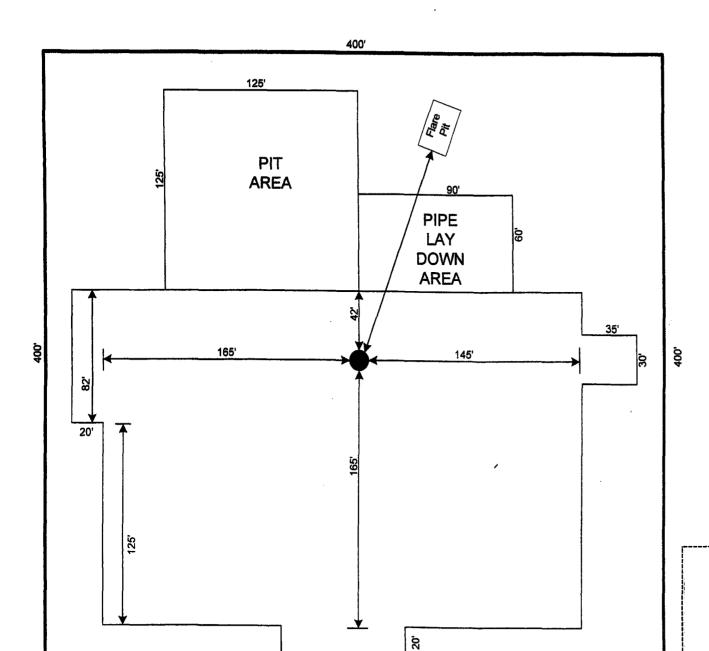
LEASE MAGNUM 5 FEDERAL COM.

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

U.S.G.S. TOPOGRAPHIC MAP LOCO HILLS, N.M.

Exhibit "C"





400'

RIG # 80

GRUY PETROLEUM MANAGEMENT COMPANY IRVING TEXAS

SCALE 1"=60"

Exhibit D
Rig Layout Plan
Magnum 5 Federal Com No. 4
Gruy Petroleum Management Co.
Unit I; Sec. 5; T18S; R31E
1980' FSL & 1190' FEL
Eddy County, NM

