# 0487 Barry

DEPARTMENT OF THE INTERIOR

# N.M. Oil Cons. DIV-Dist. 2 1301 W. Grand Avenue

UNITED STATES Artesia, NM 88210

FORM APPROVED OMB NO. 1004-0136

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

ther instructions on

reverse side) 5. LEASE DESIGNATION AND SERIAL NO.

LC 065457

BUR	EAU OF LAND MANAGI	=MEN!			LC 003437		
		······································			6. IF INDIAN, ALLOTTES O	R TRIBE NAME	
	PLICATION FOR PERMIT	TO DRILL O	R DEEPEN				
1a. TYPE OF WORK	DRILL X	DEEPEN			7. UNIT AGREEMENT NAI	ME	
1b. TYPE OF WELL OIL	GAS X	SINGLE	MULTIPLE		N/A		
WELL	」 GAS [本] WELL OTH	8. FARM OR LEASE NAM	E. WELL NO.				
2. NAME OF OPERATOR		ER ZONE	ZONE		IM Coton Fo	Janal NICT 1 No. 4	
Gruy Petroleum 1	Management Co.				J IVI Gates Fe	deral NCT-1 No. 4	
3. ADDRESS AND TELEPHO	DNE NO.					- 74	
P.O. Box 140907	Irving TX 75014 972-401-311	1			30-015	34052	
4. LOCATION OF WELL	(Report location clearly and in accordance v	ith any State requiren	nents.*)		10. FIELD AND POOL, OR		
			RECEIV	ET (T)	White City; Pen		
			NECEIV	EU	11. SEC. T.,R.,M., BLOCK	AND SURVEY	
10001 577 0 15	1001 FTTT G . 00 04G 06F		APR 0 8	2005	OR AREA		
	00' FWL Sec 30-24S-26E		- OUL MAT		Sec. 30 T24S R26E		
14. DISTANCE IN MILES AND DIE 17 miles South of	RECTION FROM NEAREST TOWN OR POST OFF	ICE*	o o o o	ËC! Ψ.		13. STATE	
17 mnes South of	Carisbau				Eddy	NM	
15. DISTANCE FROM PROPO LOCATION TO NEAR		16. NO. OF ACE	RES IN LEASE	17. NO. O	FACRES ASSIGNED		
PROPERTY OR LEAS	E LINE. T.O			10 11110 11	640		
(Also to nearest drlg. unit li	ine, if any) 1000'	800			640		
18. DISTANCE FROM PROPO		- ! - · · ·	19. PROPOSED DEPTH	20.	ROTARY OR CABLE TOOLS		
OR APPLIED FOR, ON	DRILLING COMPLETED, THIS LEASE, FT.	<del>-</del>		]			
		33 '	13000'		Rotary		
21. ELEVATIONS (Show wheth	her DF RT GR etc.)		22. APPROX, DATE WORK	WILL START*			
3467' G		04-01-04					
23	PROPOSED CA	SING AND CEN	MENTING PROGRAM				
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGI	WEIGHT PER FOOT		ING DEPTH	QUANTITY OF CEMENT	
17-1/2"	J-55 13 3/8"	54.5 #	54.5 #		)' WITNESS	490 sx circulate	
12 1/4"	NS-110 9 5/8"	40 #	40 #		0'	1200 sx circulate	
7 7/8"	N-80/P-110 5 1/2"	17#		130	000'	1620 sx TOC 2700'	
From the base of t	he surface pipe through the	running of pr	oduction casing, t	the well	will be equipped v	vith a 5000 - psi BOP	
	yuesting a variance for the 1		_				

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 PROGRA If proposal is to drill or deepen directionally, give pertinent data of	ii piopodai io i	to deepen, give data on present produ- and measured and true vertical depth			
signed Zone Fan	TITLE	Mgr. Ops. Admin	DATE	01-06-05	
(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 equi CONDITIONS OF APPROVAL, IF ASY: Maria Ketson APPROVED BY	table title to those rights in th FOR TITLE	e subject lease which would entitle the applicant to FIELD MANAGE!	o conduct operations thereon.  R  DATE	APR - 5	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 SUBJECT TO

# **Application to Drill**

Gruy Petroleum Management Co. J M Gates Federal NCT-1 No. 4 Unit Letter C Section 30 T24S - 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:

1000' FNL & 1700' FWL Sec. 30- 24S 26E

2 Elevation above sea level:

GR 3467'

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	1500	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"	0-200'	13 3/8"	54.5	8-R	ST&C	J-55
12 1/4"	0-1530'	9 5/8"	40	8-R	ST&C	NS-110
7 7/8"	0-13000'	5 1/2"	17	8-R	ST&C	N-80 / S-95

# **Application to Drill**

Gruy Petroleum Management Co. J M Gates Federal NCT-1 No. 4 Unit Letter C Section 30 T24S - R26E Eddy County, NM

#### 9 Cementing & Setting Depth:

13 3/8"	Surface	Set 250' of 13 3/8" J-55 54.5 ST&C casing. Cement with 490 Sx. Of Class "C" cement + additives, circulate cement to surface.
9 5/8"	Intermediate	Set 1530' of 9 5/8" NS-110 40# ST&C casing or casing sufficient to reach the base of the reef complex. Cement in two stages, first stage cement with 1000 Sx. Of Class POZ/C Cement + additives, second stage cement with 200 Sx. Of Class "C" + additives, circulate cement to surface.
5 1/2"	Production	Set 13000' of 5 1/2" NP-80 / S-95 17# ST&C casing. Cement in two stages, first stage cement with 1020 Sx. of Class POZ/C Cement + additives. Second stage cement with 600 Sx of Class "C" Estimated top of cement 2700'.

# 10 Pressure control Equipment:

Exhibit "E". A 13 3/8" 5000 PSI working pressure B.O.P. consisting of one set of blind rams and one set of pipe rams and a 5000 # annular type preventer. A choke manifold and 120 gallon accumulator with floor and remote operating stations and auxiliary power system. Rotating head below 6000'. A kelly cock will be installed and maintained in operable condition and a drill string safety valve in the open position will be available on the rig floor. BOP unit will be hydraulically operated. BOP will be 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 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 - 350'	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.
350' - 1530'	9.7 - 10.0	28 - 29	,	Brine water. Add paper as needed to control seepage and add lime to control pH (9-10). Use high viscosity sweeps to clean hole.
1530' - 8300'	8.4 - 9.9	28 - 29		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. J M Gates Federal NCT-1 No. 4 Unit Letter C Section 30 T24S - 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. J M Gates Federal NCT-1 No. 4 Unit Letter C Section 30 T24S - 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 Hwy 62-180 and Eddy County road # 722. Go south on Co. Rd. 722 for 1.9 miles to Eddy County Road # 426. Turn right (west) and go approx. 0.6 miles. Turn right )north) at lease Rd. Go 0.5 miles to existing Chevron NCT-1 well. Proposed well lies on west side of well pad. Go
- 2 PLANNED ACCESS ROADS: 2195' of access road will be constructed.
- 3 LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A"

A. Water wells - Well 20054 and Woodruff well.

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. J M Gates Federal NCT-1 No. 4 Unit Letter C Section 30 T24S - 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. J M Gates Federal NCT-1 No. 4 Unit Letter C Section 30 T24S - R26E Eddy County, NM

#### 9 WELL SITE LAYOUT

- A. Exhibit "D" shows location and rig layout.
- 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. J M Gates Federal NCT-1 No. 4 Unit Letter C Section 30 T24S - 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. Wes Ables house in the SW/4 of section 20 is within 1 1/2 miles of this location.

#### 12 OPERATORS REPRESENTATIVE:

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

Zeno Farris

13 CERTIFICATION: I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently 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.

#### State of New Mexico

FRENCH DR., HOBBS, NM 88240

Energy, Minerals and Natural Resources Department

DISTRICT II 1301 W. GRAND AVENUE, ARTESIA, NM 88210 OIL CONSERVATION DIVISION 1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505 Form C-102
Revised JUNE 10, 2003
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

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

DISTRICT IV 1220 S. ST. FRANCIS DR., SANTA PE, NM 87505	WELL LOCATION AND	ACREAGE DEDICATION PLAT	□ AMENDED REPORT	
API Number	Pool Code	Pool Name		
		White City; Penn (Gas)		
Property Code	Pro	Well Number		
	JM GATES	FEDERAL NCT-1	4	
OGRID No.	Ope	rator Name	Elevation	
162683	GRUY PETROLEUM	MANAGEMENT COMPANY	3467	

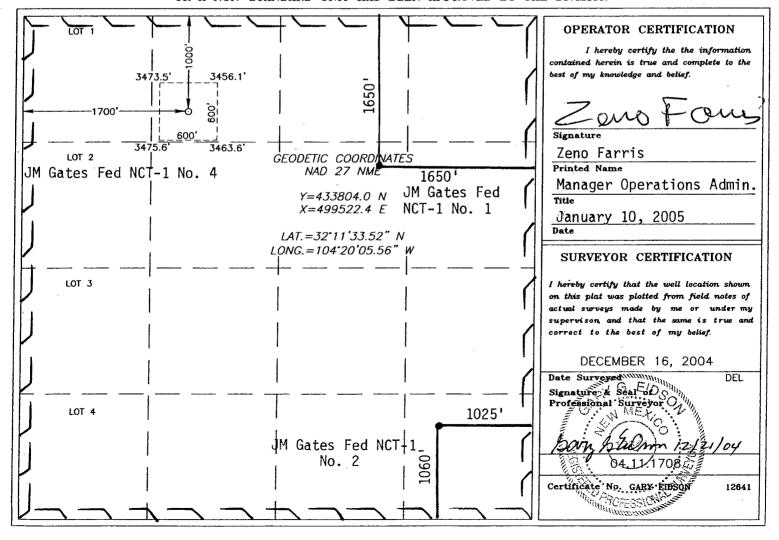
#### Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
. C	30	24-S	26-E		1000	NORTH	1700	WEST	EDDY

#### Bottom Hole Location If Different From Surface

UL or lot No.	Section	Townshi	ip 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.	*·····································		<del></del>	
640	Y	'	С						

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



400

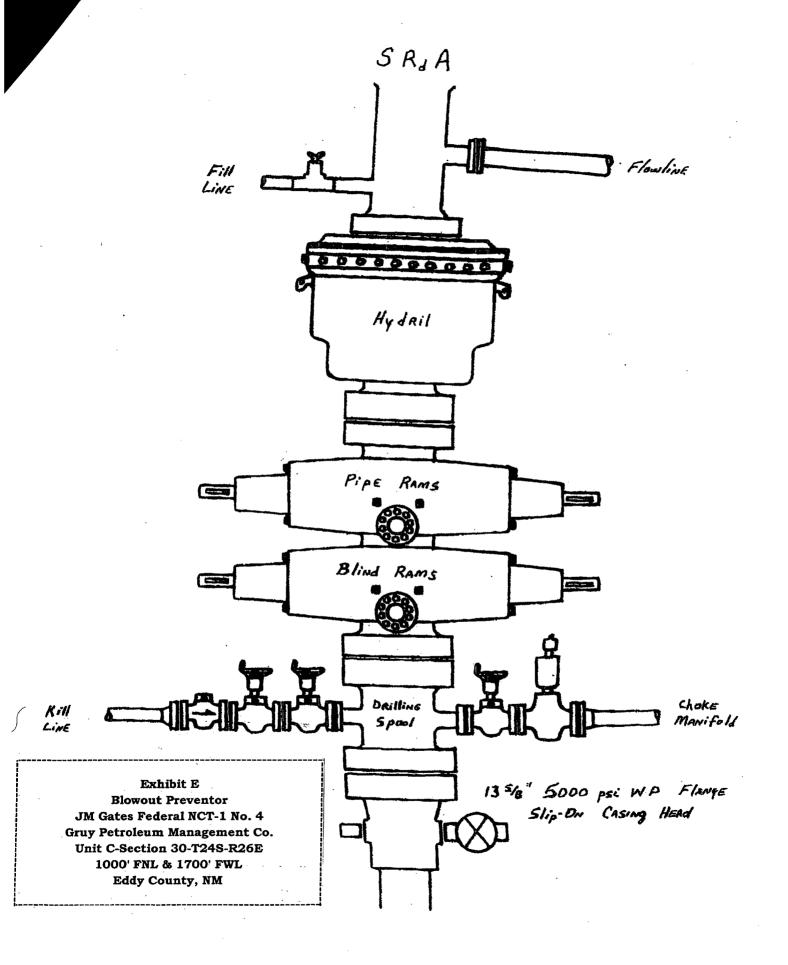
RIG#80

GRUY PETROLEUM
MANAGEMENT COMPANY
IRVING TEXAS

SCALE 1"=60'

Rig Layout Plan
JM Gates Federal NCT-1 No. 4
Gruy Petroleum Management Co.
Unit C-Section 30-T24S-R26E
1000' FNL & 1700' FWL
Eddy County, NM

Exhibit D



ORILLING OPERATIONS CHOKE MANIFOLD 5M SERVICE

4920821865

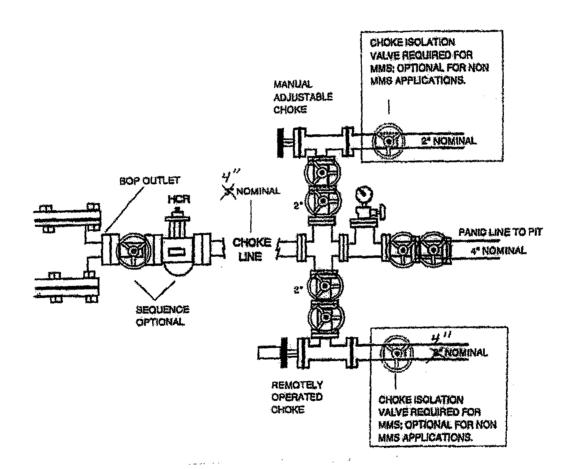


Exhibit E-Cont'd

Blowout Preventor-Choke Manifold

JM Gates Federal NCT-1 No. 4

Gruy Petroleum Management Co.

Unit C-Section 30-T24S-R26E

1000' FNL & 1700' FWL

Eddy County, NM



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

1 PM 12: 28

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.:

LC - 065457

Legal Description:

All Sec 30, T24S-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:

Zono Fami

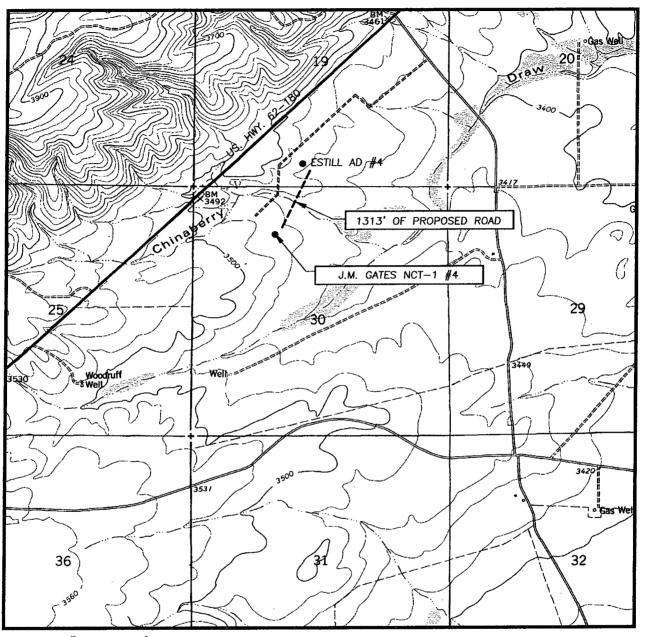
Representing Gruy Petroleum Management Co.

Name: Zeno Farris

Title: Manager, Operations Administration

Date: 01/06/05

# LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: BLACK RIVER VILLAGE, N.M. - 20'

SEC. 30 TWP. 24-S RGE. 26-E
SURVEYN.M.P.M.
COUNTYEDDY
DESCRIPTION 1000' FNL & 1700' FWL
ELEVATION 3467'
GRUY PETROLEUM OPERATOR MANAGEMENT COMPANY
LEASE J.M. GATES NCT-1
U.S.G.S. TOPOGRAPHIC MAP
BLACK RIVER VILLAGE, N.M.



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