1301 W. Grand Avenue

FORM APPROVED OMB NO. 1004-0136 CISK

Form 3160-3 (July 1992)

17-1/2"

11"

UNITED STATES

H-40 13 3/8"

K-55

9 5/8"

Artesia, NM 8821

Expires: February 28, 1995 5. LEASE DESIGNATION AND SERIAL NO.

DEPARTMENT	OF	THE	INTE	RIOR
BUREAU OF LA	ND	MANA	GEME	NT

NM 0402170

BUREAU OF LAND MANAGEMI	EN I		111.201021/	
			B. IF INDIAN, ALLOTTES OR	TRIBE NAME
APPLICATION FOR PERMIT TO	DRILL OR DEEPEN		a.	
DRILL X	DEEPEN	1	7. UNIT AGREEMENT NAMI	E
1b. TYPE OF WELL OIL GAS X	SINGLE MULTIPLE		SRM - 1115	30703
WELL OTHER	ZONE ZONE	[FARM OR LEASE NAME,	, WELCNO.
2. NAME OF OPERATOR	_		Pennzoil Fede	eral Com No. 2
Gruy Petroleum Management Co.	7617181920		9 API WELL NO.	
3. ADDRESS AND TELEPHONE NO	12/2		30-015- 37	1485
P.O. Box 140907 Irving TX 75014 972-401-3111	Ny Statements 2 1/18	3	10. FIELD AND POOL, OR V	
4. LCCATION OF WELL (Report location clearly and in accordance with a	ny Stafe requirements.") All	324	White City; Penr	ı (Gas)
	0 60 60 60	N	11. SEC. T.,R.,M., BLOCK A	AND SURVEY
•	O APTED	25	OR AREA	
760' FNL & 660' FEL UNIT A	16. NO. OF ACRES IN LEASE	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\		T24S R26E
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*	S80 6613	/	12. 000	13 STATE
17 miles South of Carlsbad	251-1808		Eddy	NM
15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST	16. NO, OF ACRES IN LEASE	17. NO. OF TO THIS WE	ACRES ASSIGNED	
PROPERTY OR LEASE LINE, T.O	320		640	
(Also to nearest drig. unit line, if any)	19. PROPOSED DEPTH	20 19	OTARY OR CABLE TOOLS	
18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING COMPLETED,	19. PROPOSED DEPTH	20. K	CONTROL TO LES	
OR APPLIED FOR, ON THIS LEASE, FT.	0' 13500'		Rotary	
252	0 13300	Ì	reotar y	
21. ELEVATIONS (Show whether DF, RT, GR, etc.)	Annahad Water Desix		22. APPROX. DATE WORK 9~30-02	WILL START
3301' GR Garisbad C	Controlled Water Basin		9-30-02	
PROPOSED CASI	NG AND CEMENTING PROGRAM			TOURS OF CEMENT
SIZE OF HOLE GRADE, SIZE OF CASING	WEIGHT PER FOOT	SETT	ING DEPTH	QUANTITY OF CEMENT

13500' N-80/S-95 5 1/2" 17# 7 7/8" The proposed well will be drilled to a depth of 13500' and completed as a White City; Penn producer.

48 #

36#

From the base of the surface pipe through the running of production casing, the well will be equipped with a 5000 - psi BOP system.

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

425'

3800'

490 sx circulate

1200 sx circulate

1620 sx TOC 2700'

IN ABOVE SPACE	E, DESCRIBE PROPOSED PROGRAM or deepen directionally, give pertinent data on s	f: If proposal is tubsurface locations	o deepen, give data on present prod and measured and true vertical dep	luctive zone and proposed ths. Give blowout prevent	new productive zone ter program, if any.
SIGNED	Zenofancy	TITLE	Mgr. Ops. Admin	DATE	07-15-02
(This space for Federal of PERMIT No.			APPROVAL DATE		
CONDITIONS OF	s not warrant or certify that the applicant holds legal or equitable APPROVAL, IF ANY: /S/ JOE G. LAR/	ole title to those rights in the	he subject lease which would entitle the applicant 100 MANAGEF	nt to conduct operations thereon.	AUG 2 0 2002
APPROVED BY	15/ JUE G. LANA		ons On Reverse Side	APPROV	AL FOR 1 YEAR

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.



DISTRICT I P.O. Box 1980, Hobbs, NW 86241-1980

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

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

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

WELL LOCATION AND ACREAGE DEDICATION PLAT

☐ AMENDED REPORT

API Number	Pool Code	Pool Name	
	87280	White City; Penn (Gas)	
Property Code	-	erty Name	Well Number
	PENNZOIL	FEDERAL COM	2
OGRID No.		ator Name	Elevation
162683	GRUY PETROLEU	M MANAGEMENT CO.	3301'

Surface Location

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Α	15	24-S	26-E		760'	NORTH	660	EAST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	p Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Dedicated Acres	Joint of	r Infill	Consolidation (ode Ord	ier No.				
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

	3306.2' 3298.5' 3302.9' 3296.9'	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief. Signature
	Pennzoil Fe deral Com 2	Zeno Farris Printed Name Mgr. Operations, Admin. Title June 11, 2002 Date SURVEYOR CERTIFICATION
Pennzoil Feder al Com 1 1980	Pennzoil Federal Com 3 660	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 28, 2002 Date Surveyed AWB Signature & Seal of Professional Surveyor
1980	2000	Certificate No. RONALD J. EIDSON 3239 GARY EIDSON 12641

Application to Drill

Gruy Petroleum Management Co.
Pennzoil Federal Com 2
Unit Letter A Section 15
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:

760' FNL & 660' FEL Sec. 15 24S 26E

2 Elevation above sea level:

GR 3301'

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:

13500'

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:

Wolfcamp Oil Atoka Gas Morrow Gas

8 Casing program:

	Hole Size	Interval	Casing OD	Weight	Thread	Collar	Grade
-	17 1/2"	0-425'	13 3/8"	48	8-R	ST&C	H-40
	12 1/4"	0-3800'	9 5/8"	36	8-R	ST&C	K-55
	7 7/8"	0-13500	5 1/2"	17	8-R	ST&C	N-80 / S-95

Application to Drill

Gruy Petroleum Management Co.
Pennzoil Federal Com 2
Unit Letter A Section 15
T24S - R26E Eddy County, NM

9 Cementing & Setting Depth:

13 3/8"	Surface	Set 425' of 13 3/8" H-40 48# ST&C casing. Cement with 490 Sx. Of Class "C" cement + additives, circulate cement to surface.
9 5/8"	Intermediate	Set 3800' of 9 5/8" K-55 36# ST&C casing. 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 13500' 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

11 Proposed Mud Circulating System:

Depth	Mud Wt	Viscosity	Fluid Loss	Type Mud
0 - 425'	8.7 - 9.2	32 - 34	ay lose circ.	Fresh water spud mud add paper to control seepage and high viscosity sweeps to clean hole.
425' - 3800'	10 - 10.3	28 - 29	ay 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.
3800' - 8300'	1/8/00	28 - 29	NC	Fresh water Paper for seepage. Lime for pH (9 - 9.5)
8300' - 10000'	9.2 - 9.4	28 - 29	NC	Cut brine. Caustic for pH control.
10000' - 13500'	9.2 - 10.6	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.
Pennzoil Federal Com 2
Unit Letter A Section 15
T24S - 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 <u>2500</u> PSI, estimated BHT <u>1000</u>.

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

Hydrogen Sul. ... 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.
 - C There should be a windsock at entrance to location.
- 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 personnel admitted to location.
- 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 of emergency help is required. In most cases cellular telephones will be available at most drilling foreman's trailer or living quarters.

7 Drillstem Testing

- A. Exhausts will be watered.
- B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
- C. If location is near any dwelling a closed DST will be performed.

Hydrogen Sulfide Drilling Operations Plan

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 necessary.

Surface Use Plan

Gruy Petroleum Management Co.
Pennzoil Federal Com 2
Unit Letter A Section 15
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. Go South of Carlsbad on Highway 62-180 for approximately 16 miles to mile marker 21. Turn left or East on Black River Village Rd. for about 2 1/4 miles. Turn left or North on Bounds Rd for about .5 miles, then left on caliche road for 0.17 miles into location.
 - C. Construct power lines and lay pipelines that will be necessary to produce this lease along road R-O-W.
- 2 PLANNED ACCESS ROADS: 915' of new 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"

Sunace Use Plan

Gruy Petroleum Management Co.
Pennzoil Federal Com 2
Unit Letter A Section 15
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 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.
Pennzoil Federal Com 2
Unit Letter A Section 15
T24S - 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.

Surface Use Plan

Gruy Petroleum Management Co.
Pennzoil Federal Com 2
Unit Letter A Section 15
T24S - R26E Eddy County, NM

11 OTHER INFORMATION:

- A. Topography consists of a sloping plane with loose tan sands, and a few eroded areas. Vegetation is mainly yucca, mesquite and shin oak.
- B. The wellsite is on private surface owned by Eugene C & Alice K Hood, 1142 Black River Village Rd, Carlsbad, NM 88220. The land is used mainly for farming, cattle ranching and oil and gas production.
- C. An Archaeological survey has been 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:

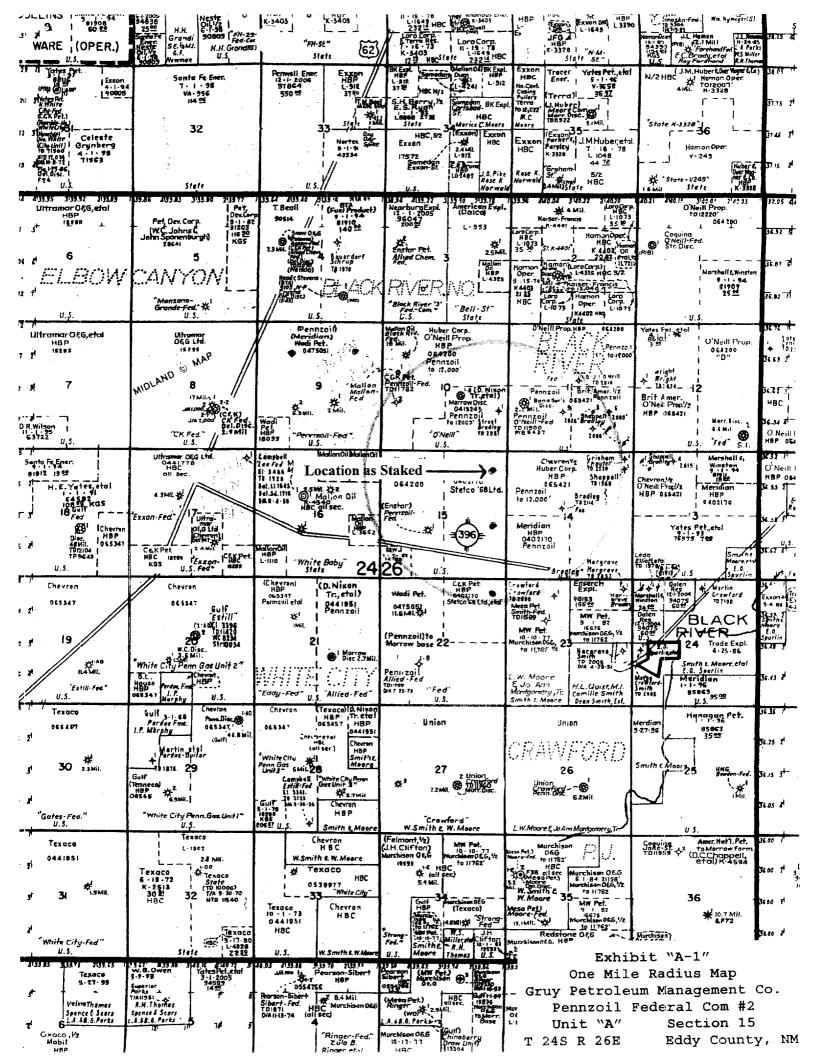
Gruy Petroleum Management Company P.O. Box 140907 Irving, TX 75014

Office Phone: (972) 443-6489

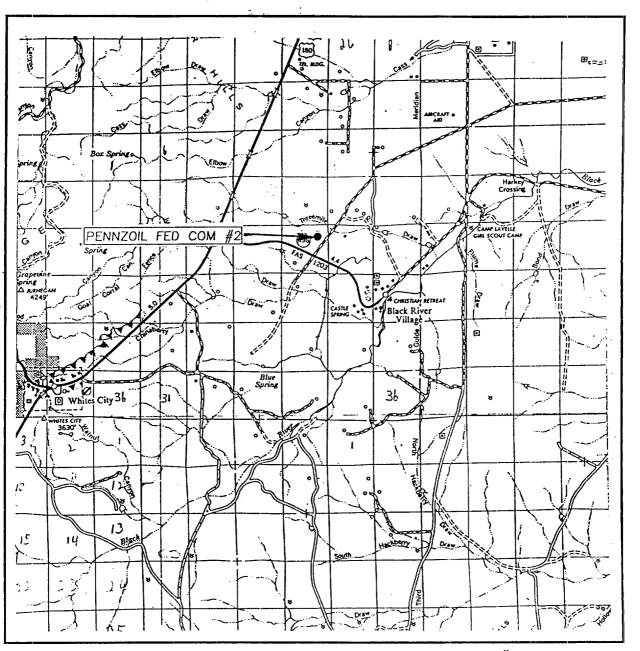
Zeno Farris

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:	Zene Faring
DATE:	7/15/02
TITLE:	Manager, Operations Administration



VICINITY MAP



SCALE: 1" = 2 MILES

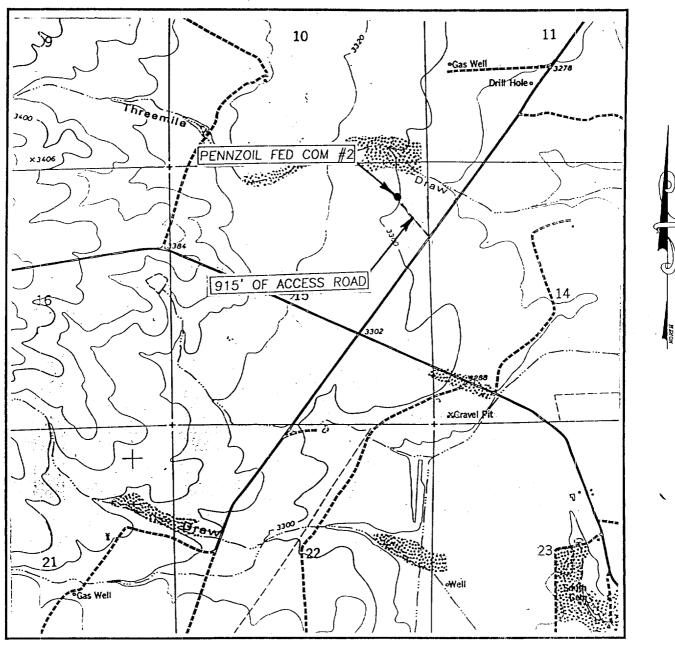
SEC. <u>15</u> T	WP. <u>24</u>	<u>S</u> F	RGE.	26-	<u> </u>
SURVEY		N.M.P.	М.		
COUNTY		EDDY	<u>′</u>		
DESCRIPTION	760'	FNL	&	660'	FEL.
ELEVATION		33	01'		

OPERATOR GRUY PETROLEUM MANAGEMENT CO.

LEASE PENNZOIL FEDERAL COM

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

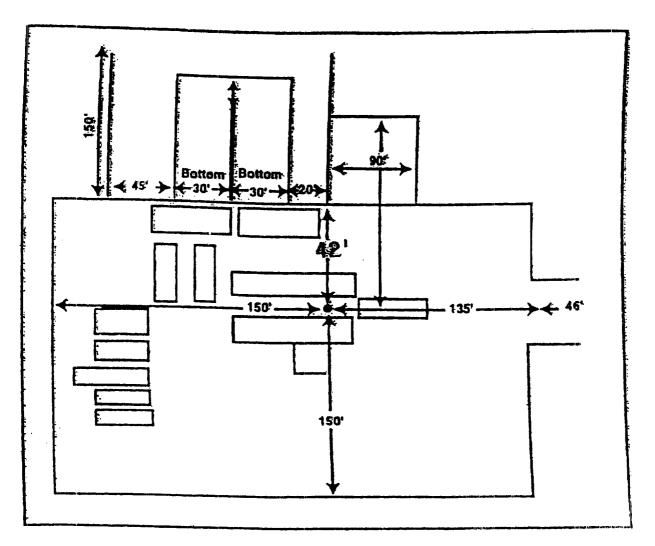
LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

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

SEC. 15 IWP. 24-S RGE. 26-E	
SURVEYN.M.P.M.	
COUNTY EDDY	JOHN WEST SURVEYING
DESCRIPTION 760' FNL & 660' FEL	
ELEVATION3301'	HOBBS, NEW MEXICO
OPERATOR GRUY PETROLEUM MANAGEMENT CO.	(505) 393-3117
LEASE PENNZOIL FEDERAL COM	•
U.S.G.S. TOPOGRAPHIC MAP BLACK RIVER VILLAGE, N.M.	



Rig 80

Exhibit "D"

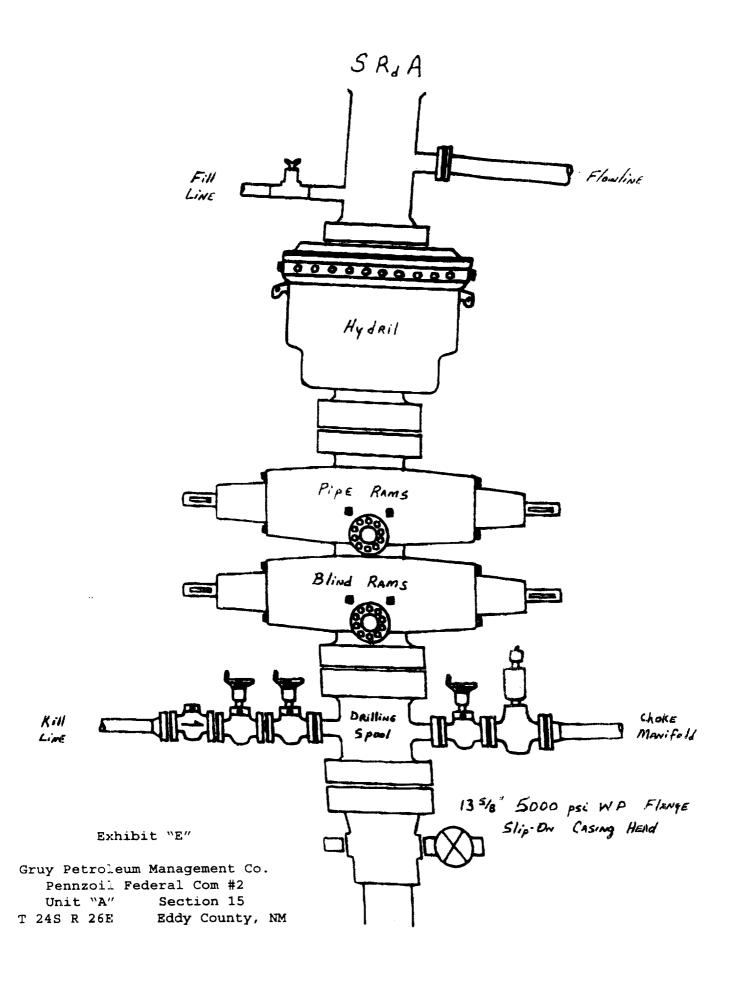
Rig Layout Plan

Gruy Petroleum Management Co.

Pennzoil Federal Com #2

Unit "A" Section 15

T 24S R 26E 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

A wholly-owned subsidiary of Magnum Hunter Resources, Inc., a New York Stock Exchange company

STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Bureau of Land Management 620 East Greene St. Carlsbad, New Mexico 88220

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 - 0402170

Legal Description:

All Sec 15, T24S-R26E

Containing 640.00 acres, Eddy County New Mexico

Formation (S):

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: 07/15/02

Operator - Landowner Agreement

Gruy Petroleum Management Co.

Pennzoil Federal Com 2

Company:

Proposed Well:

Federal Lease Number:	NM-0402170
& Alice K Hood, 1142 Black Riv	roleum Management Co. has an agreement with: Eugene C ver Village Rd, Canal, Carlsbad, NM 88220, the surface urface restoration after completion of drililng operations at the
	all pits will be filled and levelled, and all equipment and trash ite. No other requirements were made concerning restoration
7/15/02	Signature Zeno Farris
Date	Signature Zeno Farris

Manager, Operations Administration