Form 3160-3

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

1301 W. Grand Avenue:

FORM APPROVED

OMB NO. 1004-0136

(July 1992)	UNITED STATES A	Intesia I	NM 88240	Octions on	Expires: Fel	bruary 28, 1995
DEPAI	RTMENT OF THE INT	ERIOR	reverse side		5. LEASE DESIGNATION A	ND SERIAL NO.
	EAU OF LAND MANAGEM				NMNM 09407	76
	DU ICATION FOR DEPMIT TO	DDIII OD F			6. IF INDIAN, ALLOTTES O	R TRIBE NAME
1a. TYPE OF WORK	PLICATION FOR PERMIT TO	DRILL OR L	JEEPEN			
45 D/DE OF WELL	DRILL 🔀	DEEPEN			7. UNIT AGREEMENT NAM	ME .
1b. TYPE OF WELL OIL	GAS 💢	SINGLE MULTIPLE			Pending	
WELL 2. NAME OF OPERATOR	WELL OTHER	ZONE	ZONE		8. FARM OR LEASE NAME	, WELL NO.
	Management Co.				Karst 26 Fede	eral Com No. 1
3. ADDRESS AND TELEPH			10070		9. API WELL NO.	
P.O. Box 140907	Irving TX 75014 972-401-3111	2 45	6789101172			- 32872
4. LOCATION OF WELL	(Report location clearly and in accordance with a		s.*) 2	2	10. FIELD AND POOL, OR White City; Pen	<u> </u>
		/i	NECT 2003	15.16	11. SEC. T.,R.,M., BLOCK	
		8 00	つんとしたハルー	617	OR AREA	
1780' FSL & 19		108 00	ARTESIA	37	Sec. 26	T25S R26E
14. DISTANCE IN MILES AND D 24 miles South o	RECTION FROM NEAREST TOWN OR POST OFFICE* of Carlshad	13		10 / N	12. COUNTY OR PARISH	13. STATE
15. DISTANCE FROM PROP		16. NO. OF ACRES.	RILEASE 202	2 / 17. NO. OF	Eddy ACRES ASSIGNED	NM
LOCATION TO NEA	· · · · · · · · · · · · · · · · · · ·		35.4260	TO THIS W		
(Also to nearest drlg. unit	1700	360			320	
18. DISTANCE FROM PROP	OSED LOCATION* DRILLING COMPLETED,	19.	PROPOSED DEPTH	20.	ROTARY OR CABLE TOOLS	
OR APPLIED FOR, ON				D		
		NA			Rotary	
21. ELEVATIONS (Show whe		Controlled Water Basin		22. APPROX. DATE WORK WILL START* 07-15-03		
23	PROPOSED CASI	NG AND CEMEN	NTING PROGRAM			
SIZE OF HOLE	GRADE, SIZE OF CASING	WEIGHT	PER FOOT		ING DEPTH	QUANTITY OF CEMENT
17-1/2"	H-40 13 3/8"	48#	•	425		490 sx circulate
12 1/4"	J-55 9 5/8"	40 #		320		1200 sx circulate
7 7/8"	N-80/S-95 5 1/2"	17 #		125		1620 sx TOC 2700
	vill be drilled to a depth of 1250	-		•	,	
From the base of th	e surface pipe through the runr	ning of produc	ction casing, the	e well w	ill be equipped wit	h a 5000 - psi BOP
system. We are red	questing a variance for the 13 3	/8" surface ca	asing from Onsh	hore Or	der No. 2, which s	tates all casing strings
below the conducto	r, shall be pressure tested to .2	2 psi per foot	t or 1500 # whic	hever is	s greater, but not t	o exceed 70% of
the manufactures s	tated maximum internal yield. I	Per onshore	order 2 the 13 3	/8" 48 #	# H-40 casing sho	uld be tested at 70%
of its maximum inte	rnal yield of 1730 # or 1211 #. [During the rur	nning of the surf	face pip	e we do not antici	pate any pressures
greater than 500 #,	and are requesting a variance t	o test the 13	3/8" casing to 5	00#		
IN ABOVE SPACE, D	ESCRIBE PROPOSED PROGRAM:	If proposal is to de	egen give data on pres	sent produc	ctive zone and proposed ru	w productive zone

(This space for Federal or State PERMIT No. APPROVAL DATE Application approval does not warrant or certify that the apparatus CONDITIONS OF APPROVAL IF ANY LESSLIE A. THEISS ADDROVED BY /S/ LESSLIE A. THEISS JUL 1 0 2003 DATE *See Instructions On Reverse Side APPROVAL FOR 1 YEAR GENERALINE OF THE SUBJECT TO 1 makes it a crime for any person knowingly and willfully to make to any department of agency of the 1 YEAR GENERALINE OF THE DISTRIBUTION OF THE PROVAL FOR THE PR

Mgr. Ops. Admin

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

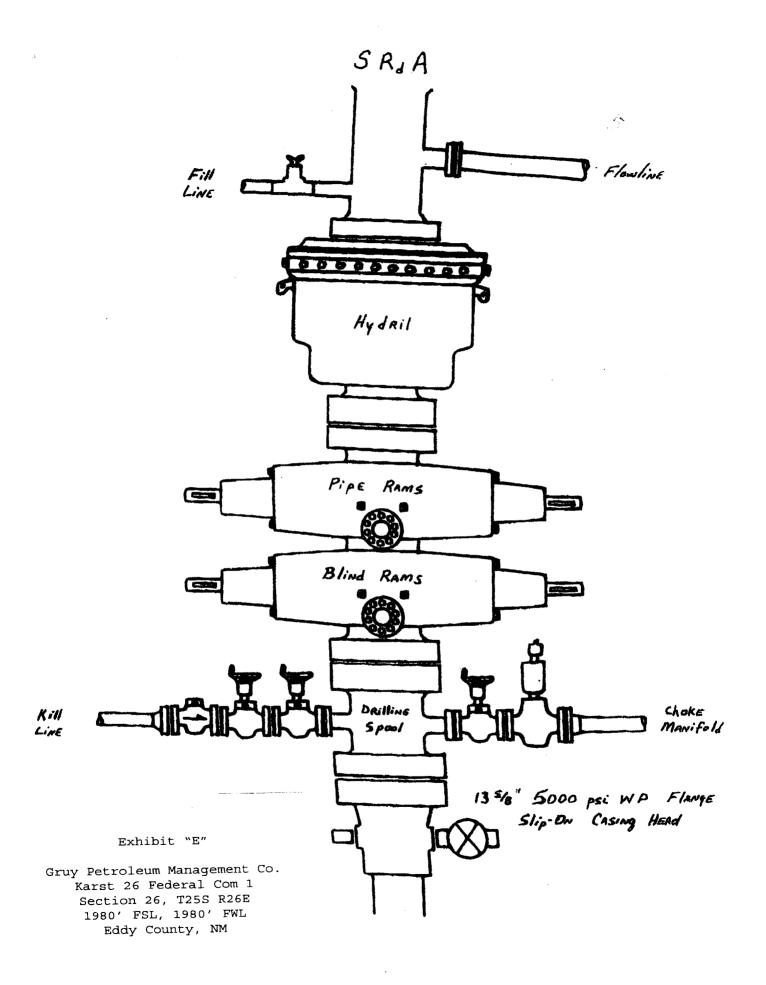
If proposal is to deepen, give data on present productive zone and proposed new productive zone.

05-21-03

DATE

SPECIAL STIPULATIONS ATTACHED

SIGNED



State of New Mexico DISTRICT I P.O. Box 1980, Hobbs, NM 88241-1980

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 86211-0719

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410 OIL CONSERVATION DIVISION

P.O. Box 2088 Santa Fe, New Mexico 87504-2088

DISTRICT IV P.G. BOX 2088, SANTA FE, N.M. 87504-2086

. BOX 2088, SANTA FE, N.M. 87504-2088	WELL LOCATION AND A	ACREAGE DEDICATION PLAT	☐ AMENDED REPORT
API Number	Pool Code	Pool Name	
		White City; Undesignated	
Property Code	-	rty Name	Well Number
	KARST 26	FEDERAL COM	1
OGRID No.	Opera	tor Name	Elevation
162683	GRUY PETROLEUM	I MANAGEMENT CO.	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
K	26	25-S	26-E		1780'	SOUTH	1980'	WEST	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 C	onsolidation (Code Ore	der No.				
320	1	1	С						

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED

OR A NON-STANDARD UNIT HAS BEEN APPROVED BY T	HE DIVISION
	OPERATOR CERTIFICATION I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.
	Zino Formis Signature Zeno Farris
	Mgr., Operations Admin Title May 23, 2003
	SURVEYOR CERTIFICATION I hereby certify that the well location shown
1980' 3248.8' 3249.2	on this plat was plotted from field notes of actual surveys made by me or under my supervisor, and that the same is true and correct to the best of my belief. May 02, 2003
3260.9' 3264.1'	Date Surveyed. AWB Signature & Scal of Professional Surveyor
	Certificate No. RONALD J. EIDSON 3238 GARY RIDSON 12841



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.:

LC - 094076

Legal Description:

E/2 Sec 26, T25S-R26E

Containing 320 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: 05/22/03

Application to Drill

Gruy Petroleum Management Co. Karst 26 Federal Com 1 Unit Letter K Section 26 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:

1780' FSL & 1980' FWL Sec. 26- 25S 26E

2 Elevation above sea level:

GR 3254'

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:

12500'

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"	0-3200'	9 5/8"	40	8-R	ST&C	J-55	
7 7/8"	0-13000'	5 1/2"	17	8-R	ST&C	N-80 / S-95	

Application to Drill

Gruy Petroleum Management Co. Karst 26 Federal Com 1 Unit Letter K Section 26 T25S - 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 3200' of 9 5/8" J-55 40# 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 12500' 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 - 425'	9.2 - 9.6	30 - 32	ay lose circ	Fresh water spud mud add paper to control seepage and high viscosity sweeps to clean hole.
425' - 3200'	9.7 - 10.0	28 - 29	ay lose circ	c.Brine water. Add paper as needed to control seepage and add lime to control pH (9-10). Use high viscosity sweeps to clean hole.
3200' - 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' - 12500'	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. Karst 26 Federal Com 1 Unit Letter K Section 26 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 <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 Sulfide 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

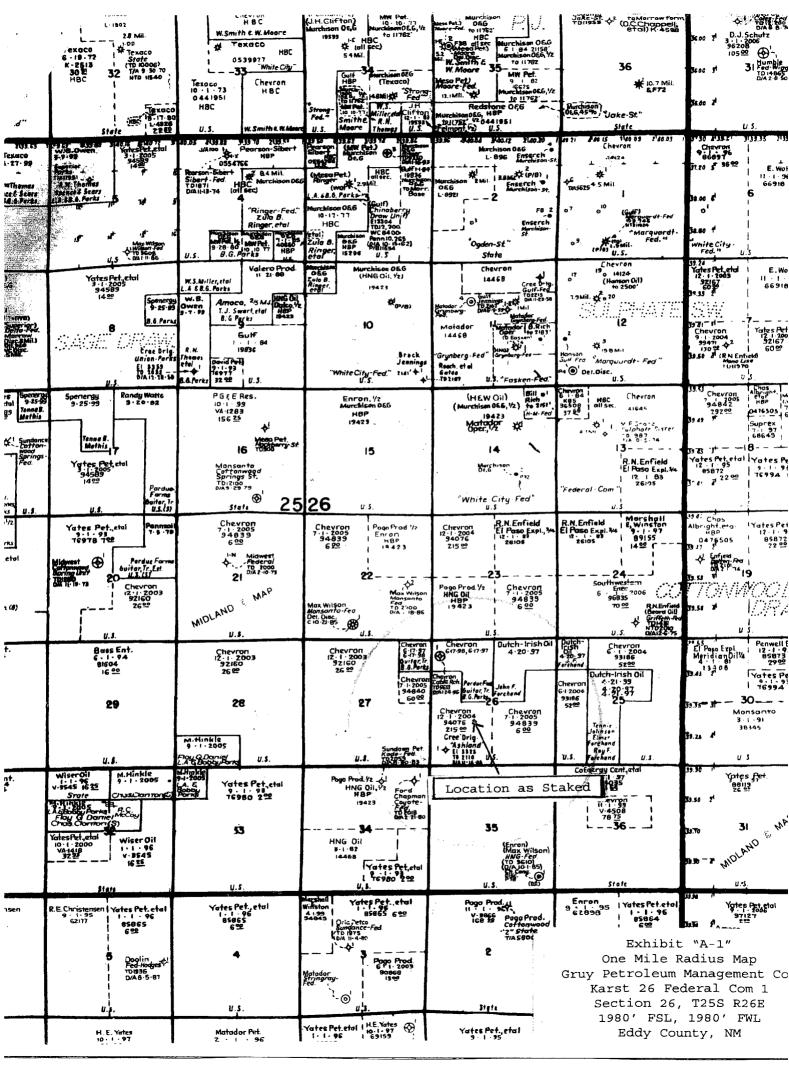
- A. H2S detectors and audio alarm system to be located at bell nipple, end of blooie line (mud pit) and on derrick floor or doghouse.
- 3 Windsock and/or wind streamers
 - A. Windsock at mudpit area should be high enough to be visible.
 - B. Windsock at briefing area should be high enough to be visible.
 - 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

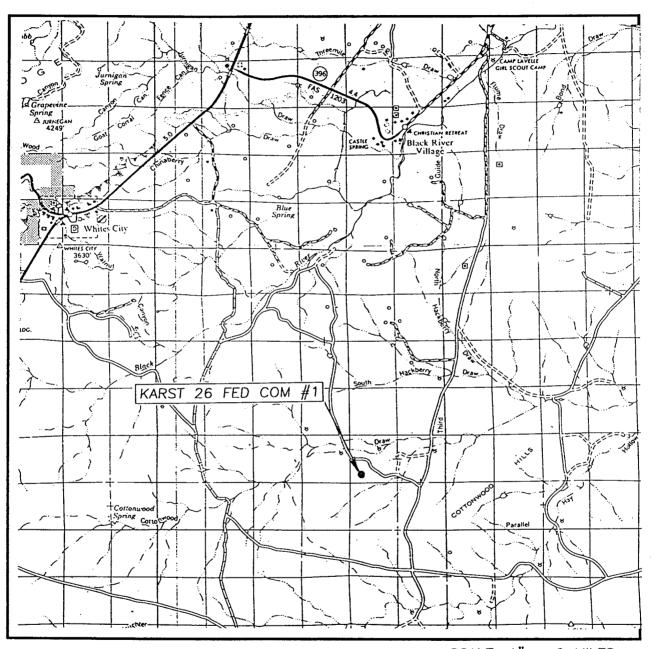
- A. Exhausts will be watered.
- B. Flare line will be equipped with an electric ignitor or a propane pilot light in case gas reaches the surface.
- C. If location is near any dwelling a closed DST will be performed.

Hydrogen Sulfide Drilling Operations Plan

- Drilling contractor supervisor will be required to be familiar with the effects H2S has on tubular goods and other mechanical equipment.
- 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.



VICINITY MAP



SCALE: 1" = 2 MILES

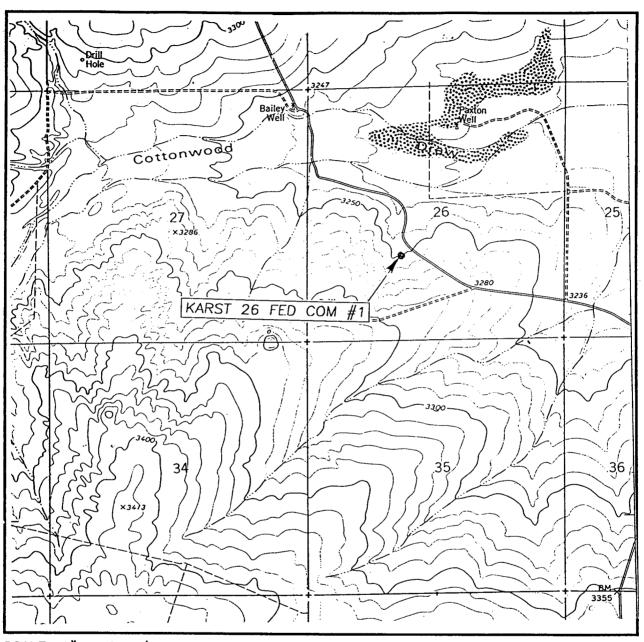
SEC. <u>26</u> T	WP. <u>25-S</u> RGE. <u>26-E</u>
SURVEY	N.M.P.M.
COUNTY	EDDY
DESCRIPTION	1780' FSL & 1980' FWL
ELEVATION	3254'

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

OPERATOR GRUY PETROLEUM MANAGEMENT CO. LEASE KARST 26 FEDERAL COM

Exhibit "B"

LOCATION VERFICATION MAP



SCALE: 1" = 2000'

CONTOUR INTERVAL: 10' JUMPING SPRING, N.M.

JOHN WEST SURVEYING

(505) 393-3117

HOBBS, NEW MEXICO

SEC. <u>26</u> TWP. <u>25-S</u> RGE. <u>26-E</u>

SURVEY N.M.P.M.

COUNTY EDDY

DESCRIPTION <u>1780'</u> FSL & 1980' FWL

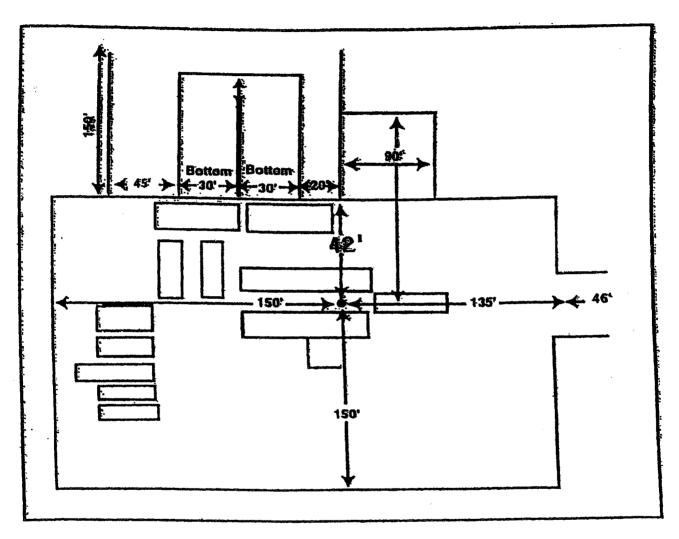
ELEVATION 3254'

OPERATOR GRUY PETROLEUM MANAGEMENT CO.

LEASE KARST 26 FEDERAL COM

U.S.G.S. TOPOGRAPHIC MAP JUMPING SPRING, N.M.

Exhibit "C"



Rig 80

Exhibit "D"
Rig Layout Plan
Gruy Petroleum Management Co.
Karst 26 Federal Com 1
Section 26, T25S R26E
1980' FSL, 1980' FWL
Eddy County, NM

Gruy Petroleum Management Co. Karst 26 Federal Com 1 Unit Letter K Section 26 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. Go South of Carlsbad on Highway 62-180 for approximately 16 miles. Turn left Blackriver Village Rd. to Old Caverns Highway. Turn South for about 9.1 miles, then right on lease road 1 mile to location.
 - C. Construct power lines and lay pipelines that will be necessary to produce this lease along road R-O-W.

With prior Sundry Notice approval.

- 2 No PLANNED ACCESS ROADS:
- 3 LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A"

A. Water wells -

Baily well in NE/4 of Sec 27

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. Karst 26 Federal Com 1 Unit Letter K Section 26 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 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.

Gruy Petroleum Management Co. Karst 26 Federal Com 1 Unit Letter K Section 26 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. Karst 26 Federal Com 1 Unit Letter K Section 26 T25S - 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 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: 5/21/03

TITLE: Manager, Operations Administration