	associat UNITED SI well, an RTMENT OF obtaine EAU OF LAND	OMB NO. 1004-0136 Expires: February 28, 1995 5. LEASE DESIGNATION AND SERIAL NO. NM-030395 6. IF INDIAN, ALLOTTES OR TRIBE NAME				
AF	PLICATION FOR PERMIT	TO DRILL OF	RDEEPEN			
a. TYPE OF WORK		DEEPEN			7. UNIT AGREEMENT NA	ME
	GAS X	SINGLE HER ZONE			8. FARM OR LEASE NAM	E, WELL NO.
NAME OF OPERATOR	11 10 11 2.	4.0		YAS	Crow Flats 7 Fede	eral No. 1
-	Management Co. 1424	<u>83</u> RS			9. API WELL NO.	
ADDRESS AND TELEPH	INNE NO. 7 Irving TX 75014 972-401-3	L11 MA	R 08 2006		30-015- 3 4	675
LOCATION OF WELL	(Report location clearly and in accordance		RANTEOIA	40	10. FIELD AND POOL, OR	
			16	0.12	Diamond Mound	
1980' FNL & 660' 1261					11. SEC. T. R., M., BLOCK	AND SURVEY
1200	B-HY DIA H	1 sult	1 2-13-06 CEA	TN		[16S-R28E
	DIRECTION FROM NEAREST TOWN OR POST O		1 215 00 (CA	<u>Ø</u>	12. COUNTY OR PARISH	13. STATE
12 miles E/SE of					Eddy	NM
5. DISTANCE FROM PROI LOCATION TO NE	AREST	16. NO. OF ACE	RES IN LEASE	TO THIS	OF ACRES ASSIGNED	
PROPERTY OR LEA Also to nearest drlg. uni	. 660	320			W/2 320	
B. DISTANCE FROM PRO			19. PROPOSED DEPTH	2	0. ROTARY OR CABLE TOOLS	3
R APPLIED FOR, O	nether DF, RT, GR, etc.)	VA	9600'		Rotary	K WILL START
3606' GF		Roswell Controll			03-01-06	
SIZE OF HOLE	GRADE, SIZE OF CASING		MENTING PROGRAM		TTING DEPTH	QUANTITY OF CEMENT
7-1/2"	H-40 13-3/8"	48#	•	400'		490 sx circulate
2-1/4"	J-55 9-5/8"	40#		1800	1	1200 sx circulate
-3/4"	P-110 5-1/2"	17#	· · · · · · · · · · · · · · · · · · ·	9600	, · · · · · · · · · · · · · · · · · · ·	1620 sx TOC 1200'
stem. We are req casing strings be ceed 70% of the r e intermediate hol	e surface pipe through the runn uesting a variance for the 13-3, low the conductor shall be pres nanufacturer's stated maximum le we do not anticipate any pres BOP system to 1000 # psi and	/8" surface casir ssure tested to 0. n internal yield. ssures greater th use rig pumps in	ng and BOP testing 22 psi per foot or 1 During the running an 1000 psi and are	from C 500 ps of the reques	Onshore Order No. 2, 5 i, whichever is greate surface pipe and the sting a variance to tes	which states er, but not to drilling of
	DESCRIBE PROPOSED PROGRA	in proposal to t			· · · · · · · · · · · · · · · · · · ·	r program, if any.
•		TITLE	Mgr. Ops. Admin		DATE	01-31-06
f proposal is to drill or de	ZenoFan					
f proposal is to drill or d	Zenò Fan		APPROVAL	DATE		

S	PE	C4/	TH	PUIA	A	THO	N

ATTACHED

DISTRICT I 1625 N. FRENCH DR., ROBBS, NM 88240

DISTRICT II

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1301 W. GRAND AVENUE, ARTESIA, NM 88210

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

Form C-102 Revised JUNE 10, 2003 Submit to Appropriate District Office State Lease - 4 Copies Fee Lease - 3 Copies

1220 S. ST. PRANCIS I API	Number		I	ool Code	Dia				
Property	Code	1	Diamond Mound; Morrow Property Name CROW FLATS 7 FEDERAL					Well Number 1	
OGRID No. 162683 OPERATOLEUM MANAGEMENT COMPANY						Elevatio 361(-		
					Surface Loca	ation			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	Bast/West line	County
2	7	16-S	28–E		1980	NORTH	1260	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 Acre	s Joint o	r Infill Co	nsolidation (Code Or	der No.				

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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



State of New Mexico

Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

1220 SOUTH ST. FRANCIS DR. Santa Fe, New Mexico 87505 Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-144 March 12, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office. For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure Is pit or below-grade tank covered by a "general plan"? Yes 🗌 No 🛛 Type of action: Registration of a pit or below-grade tank X Closure of a pit or below-grade tank Telephone: 972-443-6489 e-mail address: zfarris@cimarex.com Deerator: Gruy Petroleum Management Co. Address: P.O. Box 140907, Irving, Tx 75014-0907 Facility or well name: Crow Flats 7 Federal No. 1 API #: 30-015-_Sec_7 R28E U/L or Otr/Otr² T16S Longitude^{1041314.8W} County: Eddy Latitude 325621.78N NAD: 1927 🗶 1983 🗌 Surface Owner Federal 🗋 State 🗌 Private 🗋 Indian 🗌 Below-grade tank Pit Type: Drilling Z Production Disposal _bbl Type of fluid: __ Volume[.] RECEIVED Workover Emergency Construction material: Lined Unlined X Double-walled, with leak detection? Yes 🔲 If not, explain why not. FEB 0 9 2006 Liper type: Synthetic 🔀 Thickness 12 mil Clay 🗌 Volume WU-NHTESIA 1/2000_{bbl} Less than 50 feet (20 points) Depth to ground water (vertical distance from bottom of pit to seasonal high 50 feet or more, but less than 100 feet (10 points) water elevation of ground water.) 100 feet or more (0 points) Yes (20 points) Wellhead protection area: (Less than 200 feet from a private domestic No (0 points) water source, or less than 1000 feet from all other water sources.) Less than 200 feet (20 points) Distance to surface water: (horizontal distance to all wetlands, playas, (10 points) 200 feet or more, but less than 1000 feet irrigation canals, ditches, and perennial and ephemeral watercourses.) 1000 feet or more 0 points **Ranking Score (Total Points)** -0-If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: . (3) Attach a general description of remedial action taken including remediation start date and en onsite 🗌 offsite 🔲 If offsite, name of facility____ date. (4) Groundwater encountered: No 🗌 Yes 🗋 If yes, show depth below ground surface______ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations. I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines 🛛, a general permit 🗌, or an (attached) alternative OCD-approved plan 🗋. Date: 01-31-06 ero I - an Printed Name/Title Zeno Farris Manager Operations Administration Signature < Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations. Approval: _____ This application cannot be approved Date: _ Printed Name/Title____ due to conflicting information. gnature



LOCATION VERIFICATION MAP



COUNTY EDDY STATE N.M. DESCRIPTION 1980' FNL & 1260' FWL ELEVATION 3610' GRUY PETROLEUM OPERATOR MANAGEMENT COMPANY

LEASE CROW FLATS 7 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP DIAMOND MOUND, N.M.



Gruy Petroleum Management Co.

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5215 North O'Connor Blvd. • Suite 1500 • Irving, TX 75039 • (972) 401-3111 • Fax (972) 443-6487 Mailing Address: P.O. Box 140907 • Irving, TX 75014-0907 A wholly-owned subsidiary of Cimarex Energy Co., a NYSE Listed Company, "XEC"



STATEMENT ACCEPTING RESPONSIBILITY FOR OPERATIONS

Bureau of Land Management 620 E. Greene St. Carlsbad, New Mexico 88220 Attn: Ms. Linda Denniston

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-\$30395; W/2 Sec 7-T16S-R28E 320 acres					
County:	Eddy County, New Mexico					
Formation (S):	Morrow					
Bond Coverage:	Statewide BLM Bond					
BLM Bond File No.: Authorized Signature	Zon Found					
	Representing Gruy Petroleum Management Co.					
	Name: <u>Zeno Farris</u>					
	Title: Manager, Operations Administration					
	Date: January 31, 2006					

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

1 Location: 1980' FNL & 660' FWL

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2 <u>Elevation above sea level:</u> GR 3606'

3 <u>Geologic name of surface formation:</u> 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: 9600'
- 6 Estimated tops of geological markers:

300	Strawn LS	8400
1700	Atoka Clastics	8740
5200	Morrow Clastics	8925
6450		
	1700 5200	1700Atoka Clastics5200Morrow Clastics

7 Possible mineral bearing formation:

Atoka	Gas
Morrow	Gas

8 Casing program:

Hole Size	e Interval	Casing OD	Weight	t Thread	Collar	Grade
17-1/2"	0-400'	13-3/8"	48	8-R	ST&C	H-40
12-1/4"	0-1800'	9-5/8"	40	8-R	LT&C	J-55
8-3/4"	0-9600'	5-1/2"	17	8-R	LT&C	P-110

9 Cementing & Setting Depth:

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	13-3/8"	Surface		Set 400' 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 1800' of 9-5/8" J-55 40# LT&C casing. Lead with 1000 Sx. Of Class POZ/C Cement + additives, tail with 200 Sx. Of Class "C" + additives, circulate cement to surface.
	5-1/2"	Production		Set 9600' of 5-1/2" P-110 17# LT&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 1200'.
10 <u>Pressure</u>	<u>control Equipm</u>	<u>ent:</u>	one set of t type prever and remote head below operable co be available BOP will be once a day	A 13 3/8" 5000 PSI working pressure B.O.P. consisting of blind rams and one set of pipe rams and a 5000 # annular iter. A choke manifold and 120 gallon accumulator with floor operating stations and auxiliary power system. Rotating 6000'. A kelly cock will be installed and maintained in ondition and a drill string safety valve in the open position will e on the rig floor. BOP unit will be hydraulically operated. a nippled up on the 9 5/8" casing and will be operated at least while drilling and the blind rams will be operated when out of trips. No abnormal pressure or temperature is expected g.

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' - 1800'	9.7 - 10.0	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.
1800' - 5000'	8.4 - 9.9	28 - 29	NC	Brine water. Paper for seepage. Lime for PH (9 - 9.5)
5000' - 9600'	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 DSTs, 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. Crow Flats 7 Federal No. 1 Lot 2 Section 7 T16S - R28E Eddy County, NM

12 <u>Testing, Logging and Coring Program:</u>

- A. Mud logging program: One-man unit from 5000' to TD
- B. Electric logging program: CNL / LDT / CAL / GR, DLL / CAL / GR
- C. No DSTs or cores are planned at this time.

13 Potential Hazards:

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No abnormal pressures or temperatures are expected. The area has a potiential H2S hazard. An H2S drilling plan is attached. 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 <u>156</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 <u>25 - 30</u> 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>Morrow</u> pay will be perforated and stimulated. The well will be tested and potentialed as a gas well.

Hydrogen Sulfide Drilling Operations Plan

Gruy Petroleum Management Co. Crow Flats 7 Federal No. 1 Lot 2 Section 7 T16S - R28E Eddy County, NM

- 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

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- A. H2S detectors and audio alarm system to be located at bell nipple, end of flow 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.
- 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 not anticipated.

Hydrogen Sulfide Drilling Operations Plan

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> Gruy Petroleum Management Co. Crow Flats 7 Federal No. 1 Lot 2 Section 7 T16S - R28E Eddy County, NM

- 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

- 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.

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- B. FROM THE INTERSECTION OF US HWY #82 AND CO RD #202 (SOUTHERN UNION ROAD), GO NORTH ON CO RD #202 APPROX 8.6 MILES. TURN RIGHT AND GO EAST APPROX 1.4 MILES. TURN RIGHT AND GO SOUTH APPROX 0.5 MILES TO A PROPOSED ROAD SURVEY. FOLLOW ROAD SURVEY WEST APPROX 0.2 MILES TO THIS LOCATION.
- 2 PLANNED ACCESS ROADS: 952' of proposed road will be constructed on-lease
- 3 LOCATION OF EXISTING WELLS IN A ONE-MILE RADIUS EXHIBIT "A"
 - A. Water wells None shown
 - 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"

Surface Use Plan

Gruy Petroleum Management Co. Crow Flats 7 Federal No. 1 Lot 2 Section 7 T16S - R28E 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 by a Sundry Notice.

5 LOCATION AND TYPE OF WATER SUPPLY:

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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.

9 WELL SITE LAYOUT

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- A. Exhibit "D" shows location and rig layout.
- B. This exhibit indicates proposed location of reserve pit.
- 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 indicates that lining is needed for lateral containment of fluids.
- D. The reserve pit is to be lined with PVC or polyethylene line. The pit liner will be 12 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 recountoured 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. Crow Flats 7 Federal No. 1 Lot 2 Section 7 T16S - R28E 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 US Department of the Interior, Bureau of Land Management. The land is used mainly for farming, cattle ranching, recreational use, and
- 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 know 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 and/or its contractors/subcontractors and is in 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: _ Zano Fann

DATE: January 31, 2006

TITLE: Manager, Operations Administration



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400'





ORILLING OPERATIONS CHOKE MANIFOLD

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Exhibit E-1 – Choke Manifold Diagram Crow Flats 7 Federal No. 1 Gruy Petroleum Management Co. 1980' FNL & 660' FWL Sec 7-T16S-R28E Eddy County, NM

CONDITIONS OF APPROVAL - DRILLING

Operator's Name: Gruy Petroleum Management Company_ Well No. 1 - Crow Flats 7 Federal Location: 1980' FNL & 566' FWL sec. 7, T. 16 S., R. 28 E. 1260 Lease: NM-30395 Lease: <u>NM-30395</u> Aut Res attached 52 dated 213.16 (CAP)

I. DRILLING OPERATIONS REQUIREMENTS:

1. The Bureau of Land Management (BLM) is to be notified at (505) 234-5972 in sufficient time for a representative to witness:

A. Spudding

B. Cementing casing: 13-3/8 inch 9-5/8 inch 5-1/2 inch

C. BOP tests

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval of this office.

 3. Include the API No. assigned to well by NMOCD on the subsequent report of setting the first casing string.
 1nto 9 formation W/the potential for Hz?
 4. A Hydrogen Sulfide Contingency Plan should be activated prior to drilling in the <u>Strawn</u> formation. A copy of the JU plan shall be posted at the drilling site.

II. CASING:

1. 13-3/8 inch surface casing should be set at approximately 400 feet, below usable water and circulate cement to the surface. If cement does not circulate to the surface, the Carlsbad Field Office shall be notified at (505) 234-5972 and a temperature survey or cement bond log shall be run to verify the top of the cement. Remedial cementing shall be completed prior to drilling out that string.

2. Minimum required fill of cement behind the 9-5/8 inch intermediate casing is sufficient to circulate to the surface.

3. Minimum required fill of cement behind the 5-1/2 inch production casing is sufficient to tie back 500 feet above the uppermost perforation in the pay zone. hydro carbon bearing zone. (The

III. PRESSURE CONTROL:

1. Before drilling below the 13-3/8 inch surface casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer or Two Ram-Type Preventers and a Kelly Cock/Stabbing Valve. Before drilling below the 9-5/8 inch intermediate casing, the blowout preventer assembly shall consist of a minimum of One Annular Preventer, Two Ram-Type Preventers, and a Kelly Cock/Stabbing Valve.

2. Before drilling below the 13-3/8 inch surface casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 2000 psi. Before drilling below the 9-5/8 inch intermediate casing, minimum working pressure of the blowout preventer and related equipment (BOPE) shall be 3000 psi.

CONDITIONS OF APPROVAL - DRILLING (CONTINUED)

 Operator's Name: Gruy Petroleum Management Company
 Well No. <u>1 - Crow Flats 7 Federal</u>

 Location: <u>1980' FNL & 669* FWL</u> sec. 7, T. <u>16 S.</u>, R. <u>28 E.</u>
 Lease: <u>NM-30395</u>
 1210

 Lease: <u>NM-30395</u>
 1210
 1210
 1210

III. PRESSURE CONTROL:

3. After setting the <u>9-5/8</u> inch intermediate casing and before drilling into the <u>Wolfcamp</u> formation, the BOPE shall be tested as described in Onshore Order No. 2. Any equipment failing to test satisfactorily shall be repaired or replaced.

A. The Carlsbad Field Office shall be notified at (505) 234-5972 in sufficient time for a representative to witness the tests.

B. The tests shall be done by an independent service company.

C. The results of the test shall be reported to the BLM Carlsbad Field Office at 620 East Greene Street, Carlsbad, New Mexico 88220-6292.

D. Testing fluid must be water or an appropriate clear liquid suitable for sub-freezing temperatures. Use of drilling mud for testing is not permitted since it can mask small leaks.

E. Testing must be done in a safe workman like manner. Hard line connections shall be required.

F. A variance to test the BOPE to a reduced pressure of 1000 psi using the rig pumps before drilling below the 13-3/8 inch surface casing is approved.

IV. DRILLING MUD:

1. Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the <u>Wolfcamp</u> formation, and shall be used until production casing is run and cemented. Monitoring equipment shall consist of the following:

A. Recording pit level indicator to indicate volume gains and losses.

B. Flow-sensor on the flow-line to warn of abnormal mud returns from the well.