Form 3160-3 (December 1990)

## NM OIL CONS. COMMISSION DRAWER DD ARTESIA NALIMETED STATES DEPARTMENT OF THE INTERIOR

SUBMIT IN " `JCATE\*

Form approved. Budget Bureau No. 1004-0136 Expires: December 31, 1991

(Other instructions OFD

5. LEASE DESIGNATION AND SERIAL NO. BUREAU OF LAND MANAGEMENT CLE-029435-A S. IF INDIAN, ALLOTTED DE TRIBE HAMB APPLICATION FOR PERMIT TO DRILL OR DEEPEN 1a. TYPE OF WORK T. UNIT AGREEMENT NAME O. Ç. DEEPEN DRILL 🗵 DEFICE ARTESIA. b. TIPE OF WELL MULTIPLE WELL Y Bingle Boxe S. FARM OR LEASE HAME, WELL NO OTES Keel "A" #18 2. NAME OF OPERAT Socorro Petroleum Company Attn: Jo Ann Hooks 30-0*1*5 20 NORTH BROADWAY, SUITE 1500, OKLAHOMA CITY, OKLAHOMA 73102 4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.\*) Grayburg-Jackson 78-12-68-54 Subject to 11. SEC., T., R., M., OR BLE. AND SURVEY OR ARRA UNORTHODOX 1320' FNL & 1100' FWL Like Approval LOCATION: At proposed prod. son By State Section 7 -T17S-R31E SAME 14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFF 12. COUNTY OR PARISE 18. STATE 4 MILES \_EAST\_AND 4 MILES MORTH OF LOCO HILLS, N.M. Eddy 16. NO. OF ACRES IN LEASE 17. NO. OF ACRES ASSIGNED TO THIS WELL 15. DISTANCE PROM PROPUSED OCATION TO MEABERT ROPERTY OR LEASE LINE, 1100' FML 606.92 (Also to nearest drig, unit line, if any) 20 19. PROPOSED DEPTE 18. DISTANCE FROM PROPOSED LOCATION 20. BOTART OR CABLE TOOLS TO REARRET WELL, BRILLING, COMPLETED, OR APPLIED FOR, OF THIS BASIS, FT. 1035' 4000' Rotary 21. ELEVATIONS (Show whother DF. 27. GR. etc.) 22. APPROS. DATE WORK WILL START 3732' July 15, 1994 23 No Water Basin PROPOSED CASING AND CEMENTING PROGRAM WEIGHT PER POOT SETTING DEPTH SIXE OF MOLE SHARE SERVICES QUARTITY OF CRIMBUT 17 5 14" <u>60</u> ' Cemented with redimix to surface 12 4 8 5/8"J-55 ERW 24 ppf 550' 425 sks Class C + 2% CaCl2 + & 1b/sk FBN ST&C R-8 cellophane flakes. 7 7/8-5 ½", J-55, ST&C 15 ½ ppf 0-TD Cemented to surface with 475 sks 35.65 seamless (Poz:Class C) 6% gel + 10% salt + k lb/ We plan to circulate cement to surface on all casing strings. sk cellophane flakes and 475 sks Class Socorro Petroleum Company proposes to drill to 4000' to test the Gray-C + 2% gel + fluid loss additive + k lb/ burg-Jackson formation for commercial quantities of oil. If the Grayburgsk cellophane flakes. Jackson is deemed non-commercial, the wellbore will be plugged and abandoned per Federal regulations. to adhere to onshore oil and gas regulations are outlined in the following exhibits and attachments. Drilling Program The undersigned accepts all applicable terms, condition, Surface Use and Operating Plan stipulations and restrictions concerning operations Exhibits #1/1-A = Blowout Prevention Equipment conducted on the leased land or portions thereof. Exhibit #2 = Location and Elevation Plat as described below: Exhibit #3/3-A = Road Map and Topo Map Lease #: LC-029435-A = Wells Within 1 Mile Radius Fxhihit #4 Legal Description: Section 7-T17S-31E Exhibit #5 = Production Facilities Plat Formation: Grayburg-Jackson Fxhihit #6 Rotary Rig Layout Exhibit #7 = Casing Design
H-S Operating Plan
IN-ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deep Bond Coverage: Nationwide BLM Bond #: CO-1104 en, give data e zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface location as and measured and true vertical depths. Give blowout preventer program, if any. Randy Jackson <u>District Engineer</u> May 27. 1994 RIGNED TITLE Approval Subject to (This space for Federal or State office use) Conoral Requirements and APPROVAL DATE <del>ः ेत्र देशिक्यletions</del> Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject loss would entitle CONDITIONS OF APPROVAL, IF ANY: AREA MANAGER forig. SGD.) RICHARD I. MANIGHE

## MINIMUM BLOWOUT PREVENTER REQUIREMENTS

#### 3,000 psi Working Pressure

3 MWP

Eddy County, New Mexico Exhibit #1

CONFIGURATION

(E)

#### STACK REQUIREMENTS

No.	Hem	Min. I.D.	Min. Nominal	
	Flowkne			1
2	Filt up ime			5-
3	Drilling napple			
4	Annular preventer			
5	Two single or one dual hydroperated rams			
64	Drilling spool with 2" min. k 3" min choke line outlets	ill line and		
<b>6</b> b	2" min. kill line and 3" min. outlets in ram. (Alternate to			
7	Valve	Gale [] Plug []	3-1/6*	
8	Gale valve—power operated	3-1/6*		
9	Line to choke manifold			3-
10	Valves	Gate [] Plug []	2-1/16-	
11	Check valve		2-1/16"	
12	Casing head			<del></del>
13	Valve	Gate   Plug	1-13/16*	
14	Pressure gauge with needle	velve		
15	Kill line to rig mud pump mer	Mold		2*

	<b>©</b>		<u>څ</u>	
	. [	ANNULAR	L	
		PIPE RAMS		
		DRILLING SPOOL		
•		CASMS HEAD		<b>•</b>

		OPTIONAL
16	Flanged valve	1-13/16"

#### CONTRACTOR'S OPTION TO FURNISH:

- All equipment and connections above bradenhead or casinghead. Working pressure of preventers to be 3,000 pst, minimum.
- Automatic accumulator (80 gallon, minimum) capable of closing BOP in 30 seconds or less and, holding them closed against full rated working pressure.
- 3.BOP controls, to be located near drillers position.
- 4. Kelly equipped with Kelly cock.
- S.Inside blowout prevventer or its equivalent on derrick floor at all times with proper threads to fit pipe being used.
- Kelly saver-sub equipped with rubber casing protector at all times.
- 7. Plug type blowout preventer tester.
- 8.Extra set pipe rams to lit drill pipe in use on location at all times.
- 1. Type RX ring paskets in place of Type R.

#### MEC TO FURNISH:

- Bradenhead or casinghead and side valves.
- 2. Wear bushing, if required.

#### GENERAL NOTES:

- Deviations from this drawing may be made only with the express permission of MEC's Drilling Manager.
- 2.All connections, valves, fittinge, piping, etc., subject to wait or pump pressure must be flanged (suitable clemp connections acceptable) and have minimum working pressure equal to rated working pressure of preventers up through chore. Valves must be full opening and suitable for high pressure mud service.
- Controls to be of standard design and each merked, showing opening and closing position.
- 4. Chokes will be positioned so as not to hamper or delay changing of choke beans. Replaceable parts for adjustable choke, other bean sizes, retainers, and choke wrenches to be conveniently located for immediate use.
- S.All valves to be equipped with handwheels or handles ready for immediate use.
- 6. Choke lines must be suitably anchored.

- 7. Handwheets and extensions to be connected and ready for use.
- 8. Valves adjacent to dritting speci to be kept open. Use outside valves except for emergency.
- All seemiess steet control piping (3000 pei working pressure) to have flexible joints to avoid stress. Hosse will be permitted.
- Casingheed connections shall not be used except in case of emergency.
- 11.Do not use kill line for routine fill-up operations.

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# Attachment to Exhibit #1 NOTES REGARDING BLOWOUT PREVENTORS

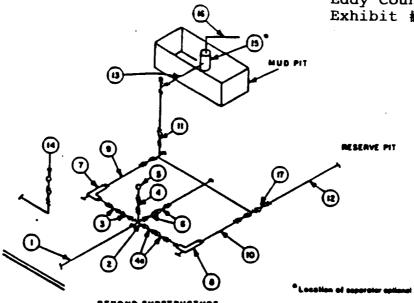
## Grayburg-Jackson Field Eddy County, New Mexico

- 1. Drilling nipple will be constructed so it can be removed mechanically without the aid of a welder. The minimum internal diameter will equal BOPE bore.
- 2.- Wear ring will be properly installed in head.
- 3. Blowout preventor and all associated fittings will be in operable condition to withstand a minimum 3000 psi working pressure.
- 4. All fittings will be flanged.
- 5. A full bore safety valve tested to a minimum 3000 psi W.P. with proper thread connections will be available on the rotary rig floor at all times.
- 6. All choke lines will be anchored to prevent movement.
- 7. All BOP equipment will be equal to or larger in bore than the internal diameter of the last casing string.
- 8. Will maintain a kelly cock attached to the kelly.
- 9. Hand wheels and wrenches will be properly installed and tested for safe operation.
- 10. Hydraulic floor control for blowout preventor will be located as near in proximity to driller's controls as possible.
- 11. All BOP equipment will meet API standards and include a minimum 40 gallon accumulator having two independent means of power to initiate closing operation.

#### MINIMUM CHOKE MANIFOLD 3.000, 5,000 and 10,000 PSI Working Pressure

#### 3 MWP - 5 MWP - 10 MWP

Eddy County, New Mexico Exhibit #1-A



BETOND SUBSTRUCTURE

	AMMANA REQUIREMENTS									
			3,000 MWP		5,000 MWP				10,000 MW/	•
No.	<u> </u>	1.D	NOMMAL	RATING	I.D.	NOMINAL	RATING	I.D.	NOMINAL	RATING
1	Line from drifting speel		3.	3,000		3.	5,000		3.	10,000
2	Cross 3"x3"x3"x2"			3.000			5,000			10.000
	Cross 3"x3"x3"x3"									10,000
3	Valves(1) Gate □ Plug □(2)	3-1/0"		3,000	3-1/6"		5.000	3-1/6"		10,000
4	Valve Gate [] Plug (2)	1-13/16"		3,800	1-13/16"		5,000	1-13/16*		10,000
48	Valves(1)	2-1/16"		3,000	2-1/16*		5.000	3-1/8"	<del>                                     </del>	10.000
5	Pressure Gauge			3,000			5.000	-	<del>                                     </del>	10,000
6	Valves Gate C Plug (2)	3-1/6"		3,000	3-1/6"		5,000	3-1/6"		10,000
7	Adjustable Choke(3)	5.		3,000	2.		5,000	2"		10,000
8	Adjustable Choke	1.		3,000	1-	<del>   </del>	5.000	2.		
9	Line		3-	3,000		3-	5.000		3.	10,000
10	Line	1	2°	3,000		<del> </del>	5.000		3.	10,000
11	Valves Gate []	3-1/8"	_	3,000	3-1/6"		5,000	3-1/8"		10,000
12	Lines	7	3-	1,000		3.	1,000			
13	Lines		3.	1,000		3.	1,000		3-	2,000
14	Plemote reading compound standpipe pressure gauge			3.000			5,000	•	3.	2,000
15	Gas Separator		2'±5'			2'#5'			-	
16	Line		4"	1,000		4.	1,000		2'x5'	2.00
17	Valves Gate []	3-1/6"		3,000	3-1/6"		5.000	3-1/6"	4.	2.000

- (1) Only one required in Class 3M.
- (2) Gate valves only shall be used for Class 10M.
- (3) Remote operated hydroutic choke required on 5,000 psi and 10,000 psi for drilling.

## **EQUIPMENT SPECIFICATIONS AND INSTALLATION INSTRUCTIONS**

- 1. All connections in choice manifold shall be welded, studded, flanged or Cameron clemp of comparable rating.
- 2. All flanges shall be API 68 or 68X and ring gaskets shall be API RX or BX. Use only 8X for 10 MWP.
- 3. All lines shall be securely enchored.
- 4. Chokes shall be equipped with tungsten carbide seats and needles, and replacements shall be available.
- 5. Choke manifold pressure and standpipe pressure gauges shall be available at the choke manifold to assist in regulating chokes. As an alternate with automatic chokes, a choke manifold pressure gauge shall be located on the rig floor in conjunction with the standpipe pressure gauge.
- 6. Line from drilling spool to choke manifold should be as straight as possible. Lines downstream from chokes shall make turns by large bends or 90° bends using bull plugged tees.
- 7. Discharge tines from chokes, choke bypass and from top of gas separator should vent as far as practical from the well.