Form 3160-3 A CATA CARE CORPASSION (November 1983) SUBMIT IN TRIPLICATES Form approved. Budget Bureau No. 1004--0 ctions on UNITED STATES THE INTERIOR 30-015-2689 Expires August 31, 1985 (formerly 9-3516) LEASE DESIGNATION AND SERIAL BO LC-028784-C BUREAU OF LAND MANAGEMENT 6. IF INDIAN, ALLOTTES OR TRIBE NAME APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK 1a. TYPE OF WORK T. UFIT AGREEMENT NAME DRILL M DEEPEN [ PLUG BACK  $\square$ h TYPE OF WELL SONS RECEIVED WELL S. FARM OR LEASE NAME WELL XX OTHER 2. NAME OF OPERATOR Keely C Fed D. WELL NO. NOV 2 1 1991 PHILLIPS PETROLEUM COMPANY S. ADDRESS OF OPERATOR 4001 Penbrook St., Odessa, Texas 79762 O. C. D.

4. LOCATION OF WELL (Report location clearly and in accordance with any State Application)

At surface. 10. PIRLD AND POOL, OR WILDCAT Grayburg Jackson-7R-Q-GB-SA 11. asc., T., R., M., OR BLE. AND SURVEY OR ARRA Unit P 330' FEL & 1210' FSL At proposed prod. some Unit P, 330' FEL & 1210' FSL Sec. 24, T-17-S, R-29-E 14. DISTANCE IN MILES AND DIRECTION FROM MEAREST TOWN OR POST OFFICE 12. COUNTY OR PARISH | 18. STATE 2-1/2 miles West of Loco Hills, NM Eddy 15. DISTANCE PROM PROPUSED.

LOCATION TO NEAREST 33
PROPERTY OR LEASE LINE, PT.
(Also to mearest drig, unit line, if any) 17. NO. OF ACRES ASSIGNED TO THIS WELL. 16. NO. OF ACRES IN LEASE 20. BOTART OR CABLE TOOLS 18. DISTANCE PROM PROPOSED LOCATIONS TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, PE. 19. PROPOSED BOPTH 6451 3650' Rotary 21. BLEVATIONE (Show whether DF, RT, GR, etc.) SE. APPROE. DATE WORK WILL START upon approval 3620.2' (unprepared) 23. PROPOSED CABING AND CEMENTING PROGRAM COUNTRY OF CREEKS WINEST PER POOR MOTEUM DEPTH SIZE OF BOLE SIZE OF CARING 8-5/8" 350' 350 sk C <u>Circ. to surface</u> 12-1/4" 24# 3650' -350 sk C Circ. to surface 5-1/2" 15.5# 7-7/8" 300 sk C Neat Tai Part ID-1 11-29-91 New LOR & API See attached BOP Detail & Mud program of the state of th NSL-3018 Appl 11-15-91 IN ABOVE SPACE DESCRIBE PROPOSED PROSERAM: If proposed in to deepen or ping back, give data on present in sone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measure preventer program, if any.

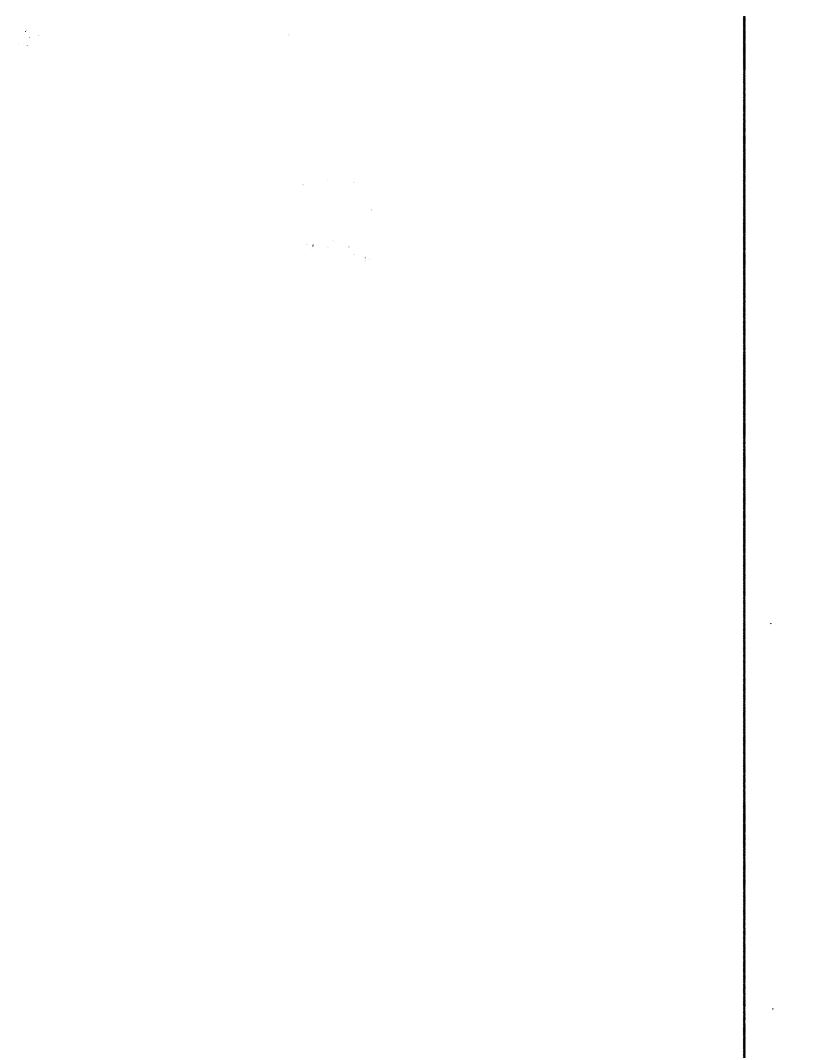
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GENERAL REQUIREMENTS AND

SPECIAL STIPULATIONS

\*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.



# State of New Mexico Energy, Minerals and Natural Resources Depx. ent

Form C-102 Revised 1-1-89

## OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT I P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Deswer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Azzec, NM 87410

#### WELL LOCATION AND ACREAGE DEDICATION PLAT

At Distances must be from the outer boundaries of the section

Operator			Lance		Well No.
Phillips P	etroleum (	Company	Keely	"C" Fed	62
	aice.	Township	Range	<u> </u>	County
P	24	17 South	29 E	ast NMC	Eddy
Actual Footage Location	of Well:				
			and 330	feet from	
Ground level Elev.	Producing	Pormation .	Pool		Dedicated Acresgs:
3620.5	Grayburg	-Jackson-7R-Q-0	B-SA Graybu	g-Jackson-7R-0-	GB-SA 40 Acres
1. Outline the	acreage dedicated	to the subject well by colo	red peacil or hackuse me	rics on the pist below.	
2. If more than	n case lease is ded	icated to the well, outline o	sch and identify the own	ership thereof (both as to wor	king interest and royalty).
	n one lease of diff force-pooling, etc		d to the well, have the m	terest of all owners been con-	solidated by communitization,
□ Y•	• • •	No If answer is "	yes" type of consolidatio	ı <u></u>	
		and tract descriptions whi	th have actually been cor	solidated. (Use reverse side	of .
this form if no	cceesary.	o the mall the Court form the code	hous been consolidated	New communitiestics, unitiesti	ion, forced-pooling, or otherwise)
or mail a non-	war ou magnet t standard unit, elis	rinating such interest, has i	seen approved by the Div	ision.	
					OPERATOR CERTIFICATION
	D	С	В	A	I hereby certify that the information
	i		1		contained herein in true and complete to the
	İ		I		best of my knowledge and belief.
	i		1		
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	ì		1		Printed Name
	İ		I		L.M. Sanders
	E	F	G	Н	Position
	- j	<b>F</b>	<b>4</b>	11	Supervisor Reg/Proration
	1		1		Сопрыну
	l		I		Phillip Petroleum Company
	1		1		Date 11/5/91
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	. [		1		SUPPERIOR CARTIFICATION
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### PROPOSED CASING & CEMENTING PROGRAM

#### **KEELY C # 62**

#### 8 5/8" 24 1b/ft K-55 Surface Casing Set at 350'-12-1/4" HOLE:

Circulate to surface with 350 sacks of Class "C" + 2% CaCl2.

Slurry Weight: Slurry Yield:

14.8 ppg 1.32 ft<sup>3</sup>/sx

Water Requirement:

6.3 gals/sx

#### 5 1/2" 15.5 1b/ft K-55 Production Casing Set at 3650'-7-7/8" HOLE:

Lead: 350 sx Class "C" 65/35 Poz + 6% Bentonite + 5% Salt. TOC = Surface.

Slurry Weight: Slurry Yield:

13.2 ppg 1.70 ft<sup>3</sup>/sx

Water Requirement:

8.8 gals/sx

Tail: 300 sx Class "C" Neat.

Slurry Weight: Slurry Yield:

Water Requirement:

14.8 ppg 1.32 ft<sup>3</sup>/sx 6.3 gals/sx

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MUD PROGRAM

KEELY C #62

	Native Solids, Paper	Native Solids	Starch/Drispac+	
% SOLIDS			ı	
CL PPM	ı	Saturated	Saturated	
FLUID LOSS	ı	1	10 cc or less	
VISCOSITY	30-36 sec/1000 cc	10.0-10.2 ppg 29-32 sec/1000 cc	31-34 sec/1000 cc	
MUD WEIGHT	8.5-9.0 ppg	10.0-10.2 ppg	10.2 ppg or less	
DEPTH	Surf - 375'	375' - 1000'	1000' - 3650'	

Use DBX dripped into flowline 10-15' upstream from lower end if extra settling of solids is desired while circulating the reserve. Remarks:

The Mud Engineer shall include on each test report the materials used for the previous 24 hr. period. Twice weekly mail copies of the test reports to:

A. C. Sewell 4001 Penbrook Odessa, Texas 79762 Send two copies of the Well Recap (Final Cost & Engineering Summaries) to A. C. Sewell at the above address.

#### SURFACE USE PLAN

Phillips Petroleum Company, <u>Keely C Fed Lease</u>, Well No. <u>62</u>, <u>1210 FSL & 330 FEL</u>, Section <u>24</u>, T-<u>17</u>-S, R-<u>29</u>-E, <u>Eddy County</u>, New Mexico. (Fed Lease No. <u>LC-028784-C</u>)

This plan is to accompany "Application for Permit to Drill" the subject well which is located approximately 2-1/2 miles west Loco Hills, New Mexico. The following is a discussion of pertinent information concerning the possible effect which the proposed drilling well may have on the environment of the well and road sites and surrounding acreage. A copy will be posted on the derrick floor so that all contractors and sub-contractors will be aware of all items of this plan.

A.	Runs north and south east of drillsite
P1 ar	nned Access Roads
A.	To run east & west off existing road to drillsite
В.	Turnouts: None
C.	Drainage Design: Centerline to sideline slope
).	Culverts, Cuts and Fills: None Surfacing Material: Caliche well pads & road
	Gates, Cattleguards, Fences: None
•	Proposed Road: The proposed road is centerline staked
•	The proposed today to content the staked
Loca Gati flow	ations of Tank Batteries, Production Facilities, Production hering, and Service Lines: Approx. 1900 feet of 2-7/8" steel wline will be laid upon the ground surface along the access road
Loca Gati flow to	ations of Tank Batteries, Production Facilities, Production hering, and Service Lines: Approx. 1900 feet of 2-7/8" steel wline will be laid upon the ground surface along the access road the satellite battery located in Unit I. Sec. 24, T-17-S. R-29-E.
Loca Gati Floo to t Edd: Wate	ations of Tank Batteries, Production Facilities, Production hering, and Service Lines: Approx. 1900 feet of 2-7/8" steel wline will be laid upon the ground surface along the access road the satellite battery located in Unit I. Sec. 24. T-17-S. R-29-E. w County. NM.
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Loca Gati floot to ' Edd' Wate	hering, and Service Lines: Approx. 1900 feet of 2-7/8" steel wline will be laid upon the ground surface along the access road the satellite battery located in Unit I. Sec. 24. T-17-S. R-29-E. v County. NM.  er Supply Source: Hauled  rce of Construction Materials: Federal pit located in Sec. 19.  7-S. R-30-E  Caliche for surfacing the new road and well pads will be obtain from: Federal pit. Sec. 19. T-17-S. R-30-E

produced water will be used for injection water on the Burch-Keely

waterflood project.

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Surface	Use	Plan-	<u>seely</u>	Ç	<u>Fed</u>	No.	62
Page 2							

- 8. Ancillary Facilities: None
- 9. Well Site Layout: Attached sketch shows the relative location and dimensions of the well pad, mud pit, reserve pit, and trash pit. Location will be 250 X 250.
- 10. Plans for Restoration of Surface:

Pit will be backfilled and levelled as soon as practical to original condition. If well is productive, caliche pad will remain as well service pad. If dry hole, pads and access roads will be ripped per regulations. Commencement of rehabilitation operations will immediately follow removal of drilling and completion equipment from location and rehabilitation of the surface is planned to be completed within 60 days from commencement.

#### 11. Other Information:

- Terrain: See Archaeological Report A. Soil: See Archaeological Report B. Vegetation: See Archaeological Report C. Surface Use: Possibly grazing D. E. Ponds and Streams: None Water Wells: None F. Residences and Buildings: 1-1/2 miles east of drlg site G. Arroyos, Canyons, etc.: None Н. Well Sign: Sign identifying & location of well will be I. matawed at drill site at spudding of well
- J. Archaeological Resources: <u>See Archaeological Report</u>

  12. Operator's Representative: Field personnel who can be contacted concerning compliance of the "Surface Use Plan" are as follows:

Production and Drilling R. C. Ainsworth 4001 Penbrook Street Odessa, Texas 79762 Phone: 915-367-1261 or Spencer Oden
1625 West Marland
Hobbs, New Mexico 88240
Phone: 505-393-5121

#### 13. Certification:

I hereby certify that I, or persons under my direct supervision, have inspected the drill site and access route; that I am familiar with the conditions which presently exist; 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 Phillips Petroleum Company and its contractors and sub-contractors in conformity with this plan and the terms and conditions under which it is approved.

L. M. Sanders, Supervisor Regulation and Proration

11/5/91
Date
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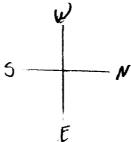


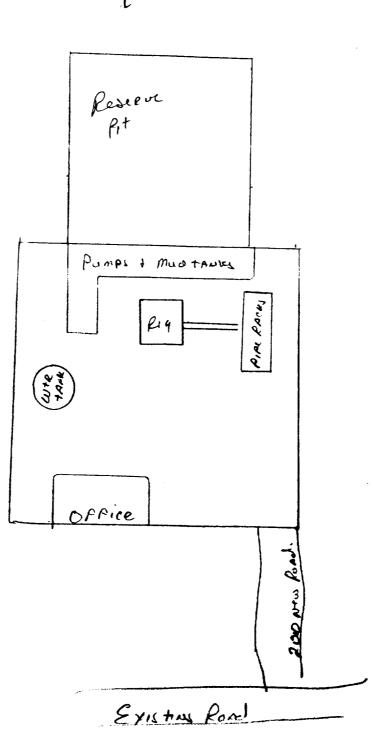
## PHILLIPS PETROLEUM COMPANY

HOBBS, NEW MEXICO 88240 1625 WEST MARLAND

Keely CFed + 62

EXPLORATION AND PRODUCTION GROUP





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T-17-0, 0-20-0 6 0-30-0 LATOURS ARCESON (MA/6/00/6A) POOL EDGY COUNTY, MEW MEXICO 2007 COUNTY, MEW MEXICO 4000\*

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#### KEELY C FED #62

#### PHILLIPS PETROLEUM COMPANY

DRIL	LING	<u>PRO</u>	GNO	<u> </u>

17 1	-F144   (VA912A1A
1.	Location of Proposed Well: Unit P. Sec. 24, T-17-S, R-29-E, 1210 FSL, 330 FEL.
2.	Unprepared Ground Elevation: 3620.2
3.	The geologic name of the surface formation is <u>San Andres (Keely)</u> .
4.	Type of drilling tools will be <u>rotary</u> .
5.	Proposed drilling depth is 3650'
6.	The estimated tops of important geologic markers are as follows:
	Metex 2410'
	Premier 2520'
	Jackson 2690'
8.	Production String 5-1/2" - 350' 3650'  Cement Program:  Surface String = Set at 350'. 12-1/4" hole. circulate to surface with 350 sacks of Class "C" + 2% CaCl2.
	Slurry weight: 14.8 ppg
	Slurry yield: 1.32 ft <sup>3</sup> /sx
	Production String: Set at 3650', 7-7/8" hole. Lead: 350 sx Class "C" 65/35 Poz + 6% Bentonite + 5% salt. TOC = surface. Slurry weight = 13.2 ppg. slurry yield = 1.70 ft <sup>3</sup> /sx. Tail: 300 sx Class "C" neat. Slurry weight: 14.8 ppg, slurry yield = 1.32 ft <sup>3</sup> /sx.
	Water Requirement: 6.3 gals/sx
9.	The minimum specifications for pressure control equipment which are to be used, a schematic diagram thereof showing sizes, pressure ratings (or) API series and the testing procedure and testing frequency are attached.
10.	The proposed mud program is attached.

11. The testing, logging, and coring programs are as follows:

D.S.T.'s or cores: 7 cores 25' upbore + 15' below each zone (Andres, Keely, and Sub Keely zones)

Logs: CNL/LDT (TD-1500')' DDL/MLL (TD-1500') FWS (TD-2000)' SPECTRALOG (TD-2000) HFDL (TD-2000).

Keely	CF	ed #62	
Drill	ing	<b>Prognosis</b>	
Page		_	

	Special Tests:
12.	Anticipate no abnormal pressures or temperatures to be encountered or any other potential hazards such as Hydrogen Sulfide Gas. Low rick H <sub>2</sub> S equipment will be used.
13.	The anticipated starting date is immediately upon approval with duration of operations for approximately 30 days thereafter.
14.	Water Supply: <u>hauled</u>
15.	Caliche for road and pad construction to be obtained from Federal pit.

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#### **BLOWOUT PREVENTER REQUIREMENTS**

Well	Name: KEELY C FED, WELL #62
Ι.	Blowout preventer equipment, installation, testing and responsibilities will be in accordance with Phillips Company's Blowout Prevente Standards.
II.	Figure Nos. 7-9 (Drawing Attached): Casing String 8-5/8 BOP Size 11"; Working Pressure 2M or 3M psi
III.	Equipment to be furnished by Contractor:
	A. Ram Type BOPs:  1. No. Required 2  2. Acceptable Manufacturers & Types a. Cameron Iron Works: QRC; F; SS; U b. Shaffer Tool Works: B; E; LWS; LWP c. Hydril
	B. Annular Type BOPs:  1. No. Required 0 2. Acceptable Manufacturers & Types a. Hydril - GK b. Shaffer - Spherical c. Cameron - D

- C. Preventer Operating Equipment
  - 1. Hydraulic Pump air, steam or electrically operated of sufficient volume and pressure capacity to close the largest ram type preventer in less than 30 seconds. Electrically operated pump must be equipped with explosion proof motor and controls.
  - 2. Manifold with a control valve for each preventer.
  - 3. A Hydril or equivalent regulator for each annular type preventer.
  - 4. Accumulator of sufficient volume and pressure capacity to close all preventers in the assembly without recharging. If the pump in C.1. is incapable of recharging the accumulator in excess of 1500 psi, a separate pump capable of this is to be furnished.
  - 5. Remote control panel with a station for each preventer control valve.
  - 6. Steel piping to connect hydraulic closing units to preventers.
  - 7. Choke manifold with seamless steel piping and flanged or clamp hub connections. Choke manifold assembly and piping sizes as specified, on the attached drawing. All working lines, except hydraulic closing lines, shall have flanged or clamp hub connections to preventers, spools and casing heads.
  - 8. Full opening drill string safety valve (I.D. equal or larger than I.D. of tool joint in use). Working pressure to equal or exceed specified BOP working pressure. O.D. and configuration such that valve can be run in the hole with adequate clearance.
  - 9. Full opening upper Kelly cock. Working pressure to equal or exceed specified BOP working pressure.

#### III. C. (continued)

- 10. Hydraulic pump of sufficient pressure rating to test preventer assembly to rated working pressure with necessary hose and fittings to connect the pump to drill pipe box or safety valve pin.
- 11. Drilling spool for use wth single ram type preventers or with dual ram type preventers which do not have outlets between the rams.
- 12. Two valves on each side of drilling spool or dual preventers, one side for choke manifold connection and the other for kill line connection.
- 13. Hand wheels and extensions for manual operation of the ram type preventers. U-joints, extension guides, working platform(s) as necessary.
- 14. A 1" 5000 psi WP plug valve on the closing side of the annular type preventer using a XXE 1" x 4" nipple.
- 15. Flowlines from choke manifold to pits.
- 16. Pressure gauge with pressure range at least equivalent to BOP WP.

#### IV. Equipment to be Furnished by Phillips:

- A. Test plug to seat in casing head.
- B. Remote controlled chokes, if installed.
- C. Casinghead with valves on outlets.
- D. Inside blowout preventer, if required.
- E. Mud-gas separator, if required, and necessary piping.

#### V. Location of Equipment & Controls:

- A. Remote control panel on the rig floor adjacent to drillers position and stairway exit from the floor.
- B. Accumulator-Hydraulic Control Valve Unit to be placed minimum of 50 feet from well bore in easily accessible location.
- C. Choke Manifold located 5 feet or more from the BOPs with minimum number of turns in the run.
- D. Manual closing facilities installed so handwheels are outside the substructures in unobstructed location. U-joints, extension guides and working platforms installed as necessary for proper and safe operation.
- E. Choke Manifold connection, where possible, is to be made between the two bottom ram type preventers through use of a drilling spool or by connecting between rams of dual type units with outlets so installed.
  - 1. On dual type preventers where outlets are not installed between rams, connection is to be made to a drilling spool installed between the ram type and annular type preventers.

#### V. (Continued)

- F. Position and Type Rams will be as shown on the attached drawing.
- G. Fill up line to be tied into the bell nipple above annular preventers.
- H. Safety Valve, open with connections and/or subs available to fit any tool joint in use, shall be on the rig floor at all times.

#### VI. Testing

A. Initial Installation Test

Immediately after installation, each component part of the blowout preventer assembly including choke lines, valves and closing facilities will be tested individually by steps as outlined in the Blowout Preventer Testing Procedure section of Phillips' Blowout Preventer Standards. The test pressure will be at the working pressure specified in Item II. All components must be satisfactorily tested before drilling out.

B. Ram Change or Repair Test

- After each ram change or when any component part of the preventer assembly, including lines and valves, is disturbed, the disturbed portion is to be tested to working pressure specified in Item II.
- 2. Installation of casing rams is not required for running casing.

C. Weekly Pressure Test

The first trip out of the hole after 12:01 AM, Tuesday, weekly test will be performed as outlined in the Blowout Preventer Testing Procedure which includes testing the entire assembly with water to 1/2 the specified working pressure for 10 minutes. The Kelly cock and safety valve are to be tested to the specified working pressure. The weekly test is not required where the test falls within three days after the initial installation test.

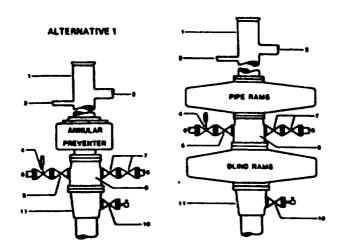
D. Operational Test

Each preventer unit is to be closed and opened on each trip or at least once each 48 hours (trip is not required just to actuate blind rams or pipe rams that do not fit top section of tapered string).

#### VII. Responsibilities

- A. Contractor is to install and test the blowout preventer assembly as specified.
- B. The driller is to check and record the accumulator pressure on the daily drilling report at the beginning of each tour.
- C. Expense of rig time and pressure testing services for initial and weekly tests will be borne by:
  - 1. Contractor while on footage contract.
  - 2. Owner while on daywork contract.

#### ALTERNATIVE 2

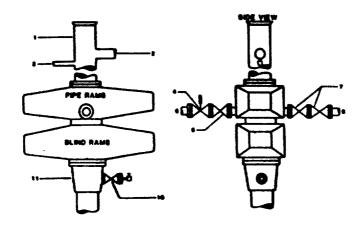


- 1. BELL NIPPLE

- 2. FLOW LINE 3. FILL-UP LINE 4. 2" FE PRESSURE OPERATED CHOKE LINE VALVE
- S. 2" PE GATE VALVE
- & 2" FE CHOKE LINE TO MANIFOLD
- 7. 2" FE GATE VALVES B. 2" FE KILL LINE
- 8. DAILLING BOOL
- 10. 2" BE OR FE GATE VALVE WITH NEEDLE
- VALVE
- 11. CASING HEAD HOUSING

NOTE: THE DRILLING SPOOL MAY BE LOCATED BELOW BOTH SETS OF RAME IF A DOUBLE PREVENTER IS USED AND IT DOES NOT HAVE SUITABLE OUTLETS BETWEEN RAME

Figure 7-9. Standard Hydraulic Blowout Preventer Assembly (2 M or 3 M Working Pressure) Alternative 1



- 1. DELL HIPPLE
- 2. FLOW LINE 3. FILLUP LINE
- 4. 2" PE PRESSURE OPERATED CHOKE LINE VALVE
- I' PE GATE VALVE
- & 2" FE CHOKE LINE TO MANIFOLD
- 7. 2" FE GATE VALVES & 2" FE KILL LINE
- 16. 2" SE OR PE GATE VALVE WITH NEEDLE VALVE

11. CABING HEAD HOUSING

Figure 7-10. Standard Hydraulic Blowout Preventer Assembly (2 M or 3 M Working Pressure) Alternative 3 (without Drilling Spool)

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