

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

MINERAL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

30-025-29829

Form C-101
Revised 10-1-78

NO. OF COPIES RECEIVED	
DISTRIBUTION	
SANTA FE	
FILE	
U.S.G.S.	
LAND OFFICE	
OPERATOR	

5A. Indicate Type of Lease
STATE ☐ FEE ☒

5. State Oil & Gas Lease No.

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work b. Type of Well OIL WELL <input checked="" type="checkbox"/> GAS WELL <input type="checkbox"/> OTHER <input type="checkbox"/> DEEPEN <input type="checkbox"/> PLUG BACK <input type="checkbox"/> SINGLE ZONE <input type="checkbox"/> MULTIPLE ZONE <input type="checkbox"/>		7. Unit Agreement Name
2. Name of Operator Pennzoil Company		8. Farm or Lease Name Viersen
3. Address of Operator P.O. Drawer 1828, Midland, TX 79702-1828		9. Well No. 3
4. Location of Well UNIT LETTER 0 LOCATED 150 FEET FROM THE south LINE AND 2080 FEET FROM THE East LINE OF SEC. 4 TWP. 17S RGE. 37E NMPM		10. Field and Pool, or Wildcat Shipp Strawn
		12. County Lea
19. Proposed Depth 11,400'		19A. Formation Strawn
20. Rotary or C.T. Rotary		
21. Elevations (Show whether DF, KT, etc.) 3774.6 GL	21A. Kind & Status Plug. Bond Blanket	21B. Drilling Contractor McVay
		22. Approx. Date Work will start 12/30/86

PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
17 1/2"	13 3/8"	48	400	400	Surface
11"	8 5/8"	28	4,200	1125	Surface
7 7/8"	5 1/2"	17	11,400	400	9,900

BOP as per enclosed diagram.

Permit Expires 6 Months From Approval
Date Unless During Underway.

NSL-R-8366

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM; IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Signed Randy Idage Title Petroleum Engineer Date 12-22-86

(This space for State Use)
ORIGINAL SIGNED BY JERRY SEXTON,
DISTRICT SUPERVISOR

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

Approved for drilling only. Well cannot be produced until such time as R-8366 is amended to cover the movement of the location 100 feet west of the location approved by R-8366.

NSL R-8366-A 3/25/87 12/10/86

RECEIVED

DEC 23 1986

OCD
HOBBS OFFICE

N. MEXICO OIL CONSERVATION COMMIS. V
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

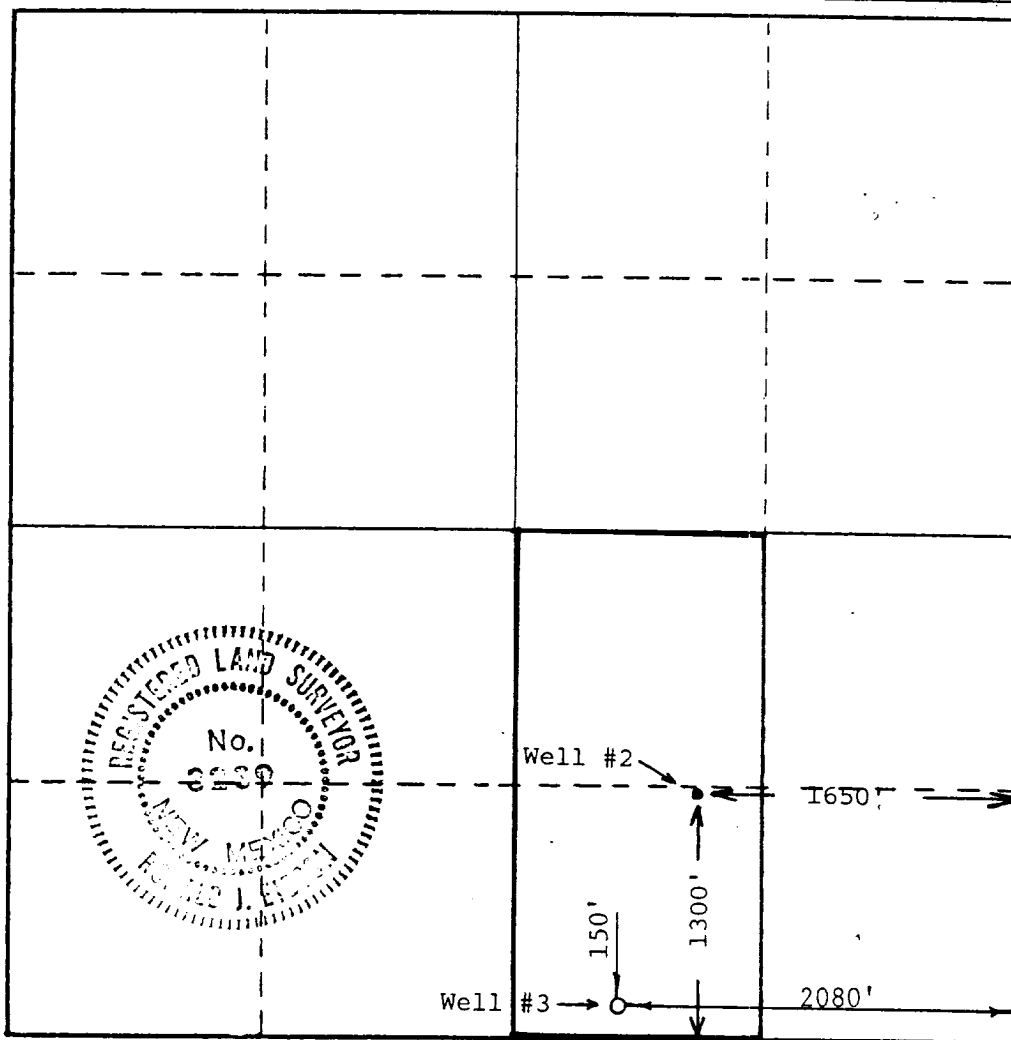
Operator Pennzoil Company			Lease Viersen		Well No. 3
Unit Letter 0	Section 4	Township 17 South	Range 37 East	County Lea	
Actual Footage Location of Well: 2080 feet from the East line and 150 feet from the South line					
Ground Level Elev. 3774.6	Producing Formation Strawn		Pool Shipp Strawn	Dedicated Acreage: 80 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

☐ Yes ☐ No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Roy R. Johnson

Name
Roy R. Johnson
Position
Production Accountant

Company
PENNZOIL COMPANY

Date
December 22, 1986

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 supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
12-19-86

Registered Professional Engineer and/or Land Surveyor

Ronald J. Gibson
Certificate No. JOHN W. WEST, 676

RECEIVED

DEC 23 1986

OCD
HOBBS OFFICE

CHECK LIST AND DRAWINGS (ATTACHED)
MINIMUM BLOWOUT PREVENTER EQUIPMENT REQUIREMENTS
(ATTACHMENT NO. _____ TO BID SHEET AND WELL SPECIFICATIONS)
3000 PSI WORKING PRESSURE
TO BE INSTALLED AFTER SETTING 13 3/8 INCH CASING
Contractor or Pzl to furnish items checked (X). See attached drawing

No.	Item	Min. Size #	Type	Press. Rating	Furnished By	
					Contr.	Pzl.
1.	Flow Line	8"	Weld	125	X	
2.	Fill Up Line	2"	Thd or Weld	125	X	
3.	Ball Nipple	12"	Weld	125	X	
4.	Rotating Head					
5.	Hydraulically Operated Gate Valve					
6.	Bloose Line					
7.	Bag Preventer	12"	Flanged	3000	X	
8.	Hydraulically Operated Ram Preventer					
9.	Drilling Spool with 2 in. and 2 in. Side Outlets	12"	Flanged	3000	X	
10.	Preventers Side Outlets _____ in. and _____ in. Use as alternate to No. 9 above.					
11.	Gate Valve	2"	Flanged	3000	X	
12.	Hydraulically Operated Gate Valve (HCR Valve)					
13.	Line to Choke Manifold	2"	Flanged	3000	X	
14.	Gate Valve	2"	Flanged	3000	X	
15.	Hydraulically Operated Gate Valve					
16.	Check Valve					
17.	Drilling Spool with _____ in. and _____ in. Side outlets					
18.	Preventer Side Outlets _____ in. and _____ in.					
19.	Gate Valve					
20.	Hydraulically Operated Gate Valve					
21.	Relief Line					
22.	Wear Flange or Bushing					
23.	Kill Line to accessible location approx. _____ ft. from rig. (MINIMUM DISTANCE)					
24.	Gate Valve					
25.	Kill Line to rig pump manifold	2"	Flanged	3000	X	
26.	_____ Way Cross, _____ in. x _____ in. x _____ in. x _____ in.					
27.	Tee, _____ in. x _____ in. x _____ in.					
28.	Bull Plug					
29.	Casing Spool					
30.	Gate Valve					
31.	Casing Spool					
32.	Gate Valve					
33.	Pressure Gauge					
34.	Casing Head					
35.	Gate Valve					
36.	Gate Valve					

Line sizes to be inside diameter.

Valves, spools and preventers sizes to be bore dimension.

EXHIBIT F

AUXILIARY EQUIPMENT TO BE FURNISHED BY CONTRACTOR PZL AS CHECKED (X).

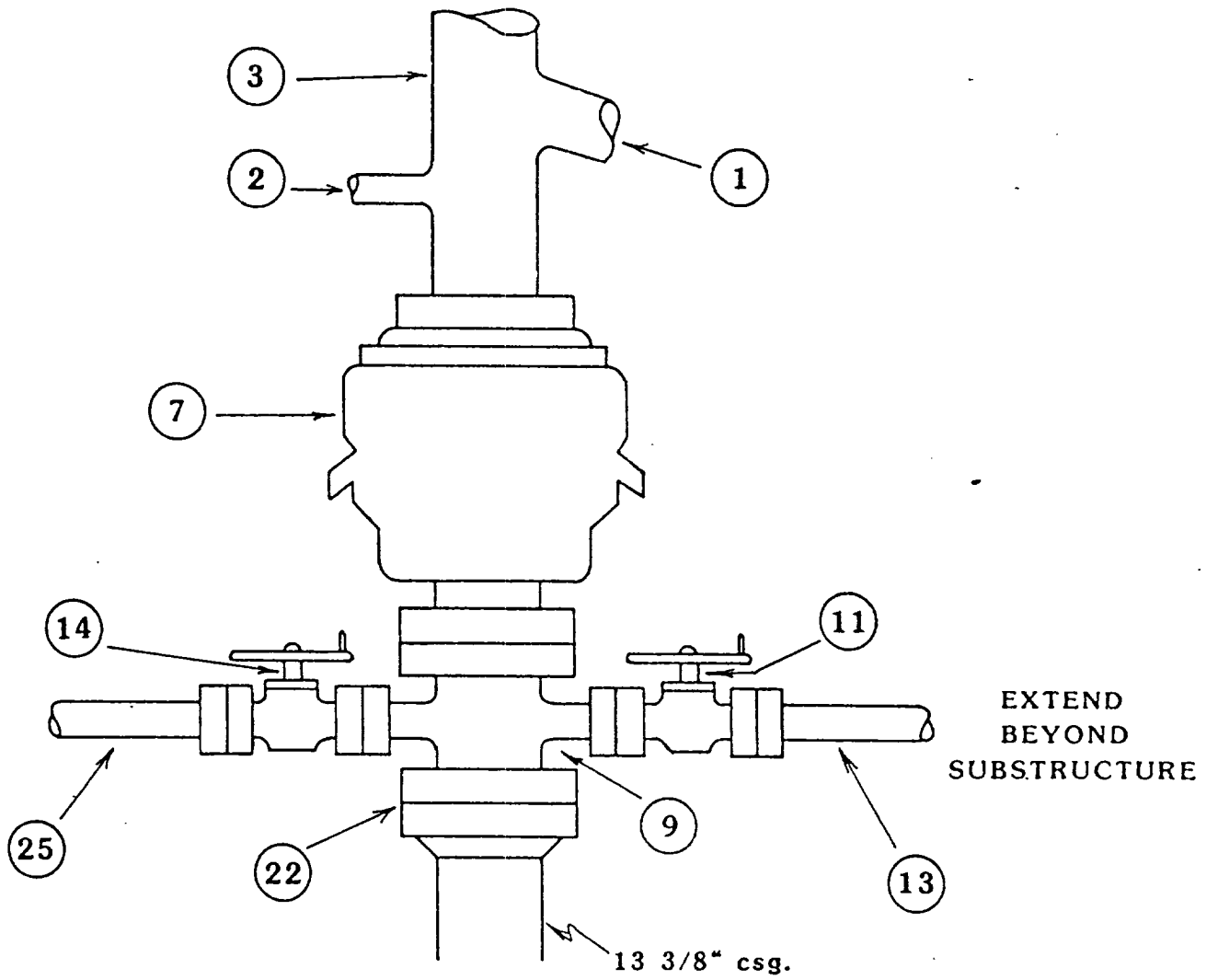
Item	Furnished By	
	Contr.	Pzl
Automatic Accumulator and Master Control. See below for details.	X	
Remote set of closing unit controls with <u>2</u> stations.	X	
Bag Preventer Pressure Regulating Control Valve on remote station	X	
Kelly Cocks: Upper - Make _____ Press. Rating <u>3000</u> Full Opening	X	
Lower - Make _____ Press. Rating <u>3000</u> Full Opening	X	
Inside Blowout Preventer: Gray/Shaffer _____ PSI WP		
Drop-In(Hydrill) _____ PSI WP		
Full Opening Ball Valve for each size drill pipe in use (Extra Lower Kelly Valves) <u>3000</u> PSI WP (Full Opening)	X	
Circulating Head for each type and size of tool joint in use		
_____ Ft. of 2 in. steel hose (Chickson) _____ PSI WP		
Blind/Shear Rams		

ACCUMULATOR AND MASTER CONTROL
SPECIFICATIONS
REQUIREMENTS CHECKED (X) SHALL APPLY.

x	Item
X	Accumulator Volume <u>80</u> gal., <u>3000</u> PSI WP Unit
X	Power for Pumps: Air X Air and Electric
X	Sufficient Capacity to Recharge Complete Unit in 6 Minutes Pumps Capacity _____ Gal/Min. at _____ PSI
X	Number of Control Valves Required (at least <u>3</u> for rig floor and remote units)
X	Pressure Regulator Valve to control pressure on bag preventer
X	Control Valves on both Master and Remote Control properly labeled with name of respective function and open and closed clearly marked.
X	Blind Ram control on both Master and Remote Control protected to avoid accidental activation. These control handles are not to be locked in position, however, as this could prevent activation from the remote station.
X	Hydraulic Lines from Accumulator to Hydraulic Device to be <u>0.9</u> in. minimum ID and have <u>3000</u> PSI minimum working pressure.
X	Pressure Gauges showing accumulator pressure, manifold pressure, pressure on bag preventer and air supply pressure on both master and remote control stations.
	Bottled Nitrogen _____ Bottles _____ ft. each at _____ PSI manifold to bypass accumulator and operate BOP directly.

EXHIBIT F

Page 3 of 3



CHECK LIST AND DRAWINGS (ATTACHED)
MINIMUM BLOWOUT PREVENTER EQUIPMENT REQUIREMENTS
 (ATTACHMENT NO. _____ TO BID SHEET AND WELL SPECIFICATIONS)
3000 PSI WORKING PRESSURE
 TO BE INSTALLED AFTER SETTING 8 5/8 INCH CASING
 Contractor or Pzl to furnish items checked (X). See attached drawing

No.	Item	Min. Size #	Type	Press. Rating	Furnished By	
					Contr.	Pzl.
1.	Flow Line	8"	Weld	125	X	
2.	Fill Up Line	2"	Thd or Weld	125	X	
3.	Bell Nipple	8"	Weld	125	X	
4.	Rotating Head					
5.	Hydraulically Operated Gate Valve					
6.	Bleed Line					
7.	Bag Preventer	8"	Flanged	3000	X	
8.	Hydraulically Operated Ram Preventer					
9.	Drilling Spool with <u>2</u> in. and <u>2</u> in. Side Outlets	8"	Flanged	3000	X	
10.	Preventers Side Outlets <u>2</u> in. and <u>2</u> in. Use as alternate to No. 9 above.	8"	Flanged	3000	X	
11.	Gate Valve	2"	Flanged	3000	X	
12.	Hydraulically Operated Gate Valve (HCR Valve)					
13.	Line to Choke Manifold	2"	Flanged	3000	X	
14.	Gate Valve	2"	Flanged	3000	X	
15.	Hydraulically Operated Gate Valve					
16.	Check Valve					
17.	Drilling Spool with _____ in. and _____ in. Side outlets					
18.	Preventer Side Outlets _____ in. and _____ in.					
19.	Gate Valve	2"	Flanged	3000		X
20.	Hydraulically Operated Gate Valve					
21.	Relief Line					
22.	Wear Flange or Bushing					
23.	Kill Line to accessible location approx. _____ ft. from rig. (MINIMUM DISTANCE)					
24.	Gate Valve					
25.	Kill Line to rig pump manifold	2"	Flanged	3000	X	
26.	_____ Way Cross, _____ in. x _____ in. x _____ in. x _____ in.					
27.	Tee, _____ in. x _____ in. x _____ in.					
28.	Bull Plug					
29.	Casing Spool					
30.	Gate Valve					
31.	Casing Spool					
32.	Gate Valve					
33.	Pressure Gauge					
34.	Casing Head	8"	Flanged	3000		X
35.	Gate Valve					
36.	Gate Valve					

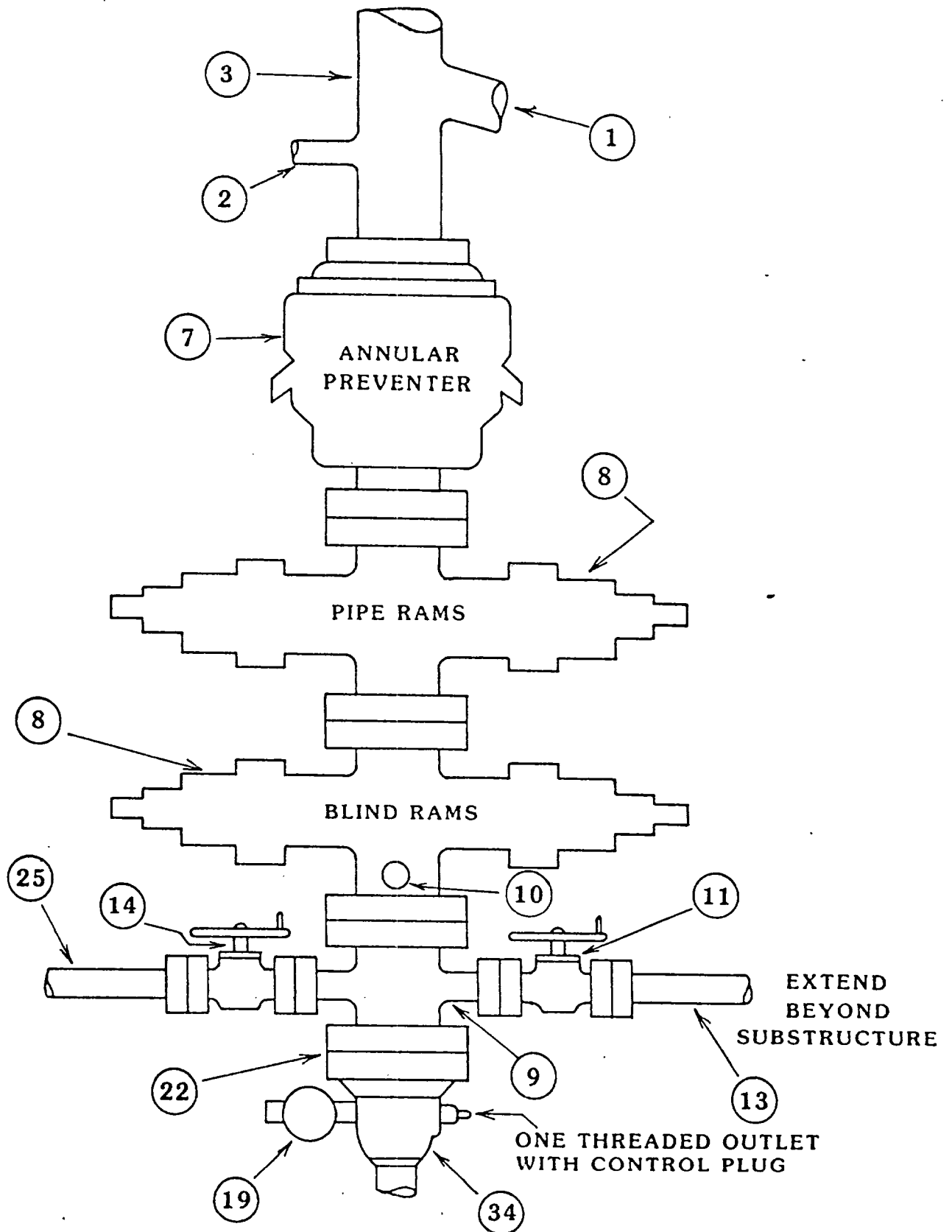
Line sizes to be inside diameter.

Valves, spools and preventers sizes to be bore dimension.

RECEIVED

DEC 23 1936

OLD
HOBBS OFFICE



GENERAL EQUIPMENT SPECIFICATIONS & INSTALLATION INSTRUCTIONS

1. All connections on the BOP stack shall be flanged or bolted ring clamp of comparable rating.
2. Flanges to be API 6B or 6BX and ring gaskets shall be API RX or BX.
3. All drilling spools are to be forged steel construction. Spools constructed from pipe are not acceptable.
4. The fill-up line shall not be connected to any side outlet below the uppermost preventer.
5. Replacement parts for the BOP equipment shall be obtained from the original manufacturer.
6. BOP stack shall be properly braced to rig substructure by turnbuckled lines or rods.
7. Connections on the kill line, choke lines and choke manifold:
 - ☒ May be threaded, welded, flanged or bolted ring clamp.
 - ☐ Shall be either flanged or bolted ring clamp of comparable rating.
8. All gate valves must be equipped with hand wheels.
9. Choke and kill lines are to be seamless steel pipe having a minimum working pressure that is based on 80% of the API minimum internal yield pressure rating of that pipe.
10. The kill line shall not be used as a fill-up line.
11. All choke lines must be as straight as possible with no abrupt bends or turns.
12. All choke lines are to be securely anchored.
13. Steel hose (chicksons) are not to be used in any part of the choke manifold.
14. The accumulator unit and master set of controls shall be located at ground level, a minimum of 75 ft. from the wellbore. The remote set of controls is to be located near the drillers position on the rig floor.
15. All hydraulic lines between the accumulator and any hydraulically operated device shall be of seamless steel pipe and swing joints. Rubber hoses are not permitted. Short lengths of high pressure hose are permitted in lines connecting the remote station to the valve actuating cylinders on the master control unit.

16. Housing and heater should be provided for accumulator, blowout preventers and choke manifold where conditions warrant.
17. All drill string blowout prevention equipment must be maintained in good operating condition and stored in an orderly condition on the rig floor.
18. Operating wrenches for the drill string BOP equipment are to be kept in full view near the driller's position.
19. Contractor to make no connection to casing head side outlets except by orders of PZL.
20. Keep on rig:
 - (a) One spare set of pipe rams, complete with packing rubbers for each size of drill pipe in use.
 - (b) Replacement parts for all manual adjustable chokes along with the necessary tools for changing parts.
21. When a rotating head is in use on the BOP stack, dresser sleeve connections in the flowline are not permitted.
22. Hand wheels and extensions (outside the substructure) shall be installed for operating the locking screws on all ram preventers and hydraulically operated gate valves on the choke and kill lines. If the installation of these extensions create a safety hazard or for some avoidable reason cannot be properly installed, a hand crank or wrench should be readily available to operate the locking screws.
23. When a wear bushing is required, only the lock-in type shall be used.
24. Waterlines and valves shall be connected and ready for use on all internal combustion engine exhausts.
25. The cellar is to be kept jetted and the preventer stack and choke manifold washed down at all times.
26. All valves are to be lubricated at regular intervals.
27. All valves are to be clearly identified as being open or closed.
28. Proper alignment of the rig with the center line or the BOP stack and casing shall be maintained at all times.
29. All flange bolts on the stack, kill line and choke manifold should be tightened at least once each week.

CHECKLIST AND DRAWING
MINIMUM CHOKE MANIFOLD EQUIPMENT REQUIREMENTS
 (ATTACHMENT NO. TO BID SHEET AND WELL SPECIFICATIONS)
3000 PSI WORKING PRESSURE
 TO BE INSTALLED AFTER SETTING 8 5/8 INCH CASING
 Contractor or Pzl to furnish items checked (X). See attached drawing.

No.	Item	Min. Size	Type	Press. Rating	Furnished By	
					Contr.	Pzl.
1.	Choke Line from BOP stock (same as Item No. 13 on Attachment 2)	2"	Weld or Flanged	3000	X	
2.	4 Way Cross, in. x in. x in. x in.	2"	Flanged	3000	X	
3.	Gate Valve	1 13/16"	Flanged	3000	X	
4.	Pressure Sensor					
5.	Pressure Gauge	1"	Threaded	3000	X	
6.	Gate Valve	2"	Flanged	3000	X	
7.	Gate Valve	2"	Flanged	3000	X	
8.	Gate Valve	2"	Flanged	3000	X	
9.	Tee x in. x in. x in.					
10.	Way Cross, in. x in. x in. x in.					
11.	Adjustable Choke	2"	Flanged	3000	X	
12.	Positive Choke	2"	Flanged	3000	X	
13.	Hydraulically Operated Choke					
14.	Forged Extension Spool					
15.	Hydraulically Operated Gate Valve					
16.	Hydraulically Operated Gate Valve					
17.	Line to Low Pressure Header	2"	Weld or Thread	1000	X	
18.	Line to Low Pressure Header	2"	Weld or Thread	1000	X	
19.	Line to Burn Pit	2"	Weld or Thread	1000	X	
20.	Line to Burn Pit	2"	Weld or Thread	1000	X	
21.	Line to Reserve Pit	2"	Weld or Thread	1000	X	
22.	Line to Mud Pit	2"	Weld or Thread	1000	X	
23.	Line to Mud/Gas Separator					
24.	Header					
25.	Header					
26.	Gate Valve	2"	Flanged	1000		X
27.	Gate Valve	2"	Flanged	1000		X
28.	Gate Valve	2"	Flanged	1000		X
29.	Gate Valve	2"	Flanged	1000		X
30.	Gate Valve					
31.	Gate Valve					
32.	Base for Choke Manifold					
33.	Block Tee, in. x in. x in. x					
34.	Tee 2 in. x 2 in. x 2 in. x	2"	Flanged	1000		X
35.	Tee 2 in. x 2 in. x 2 in. x	2"	Flanged	1000		X
36.	Operating Consoles for Hydraulic Choke					
37.	Line to Low Pressure Header					
38.	Line to Reserve Pit					
39.	Line to Mud/Gas Separator					
40.	Line to Mud/Gas Separator					
41.	Line to Burn Pit					
42.	Forged Extension Spool					
43.	Way Cross, in. x in. x in. x in. x					
44.	Gate Valve					
45.	Gate Valve					
46.	Gate Valve					

Line size to be inside diameter.

Valve, Spools and preventers to be bore dimension.

Header size to be outside diameter.

RECEIVED

DEC 23 1995

OCD
HOBBS OFFICE

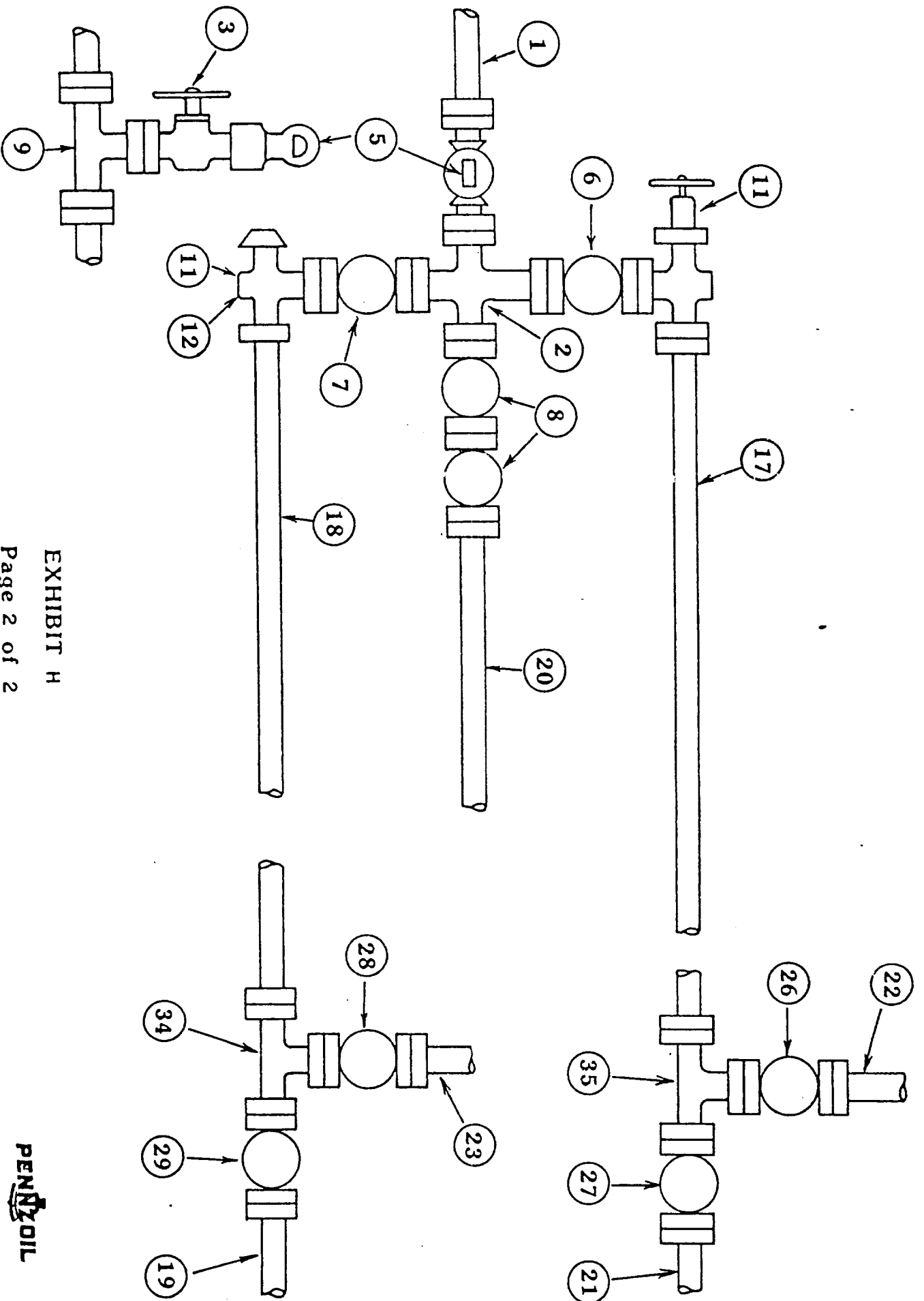


EXHIBIT J

INSTRUCTIONS FOR CONTRACTORS
(ATTACHMENT TO BID SHEET AND WELL SPECIFICATIONS)
TESTING AND OPERATION OF BLOWOUT PREVENTION EQUIPMENT

Minimum blowout preventer requirements have been established by Pennzoil. The applicable BOP and Manifold drawing shall be furnished to the contractor and will be included as part of the specifications and requirements of the Bid Sheet and Well Specifications.

The appropriate blowout preventer equipment shall be installed immediately after conductor, surface, intermediate, or production casing is cemented. At that time, the entire BOP stack with manifold is to be completely assembled, installed, pressure tested, and performance tested, and should be ready for immediate use, prior to drilling out.

TESTING BLOWOUT PREVENTERS AND CASING

Routine blowout preventer pressure tests, performance tests, and casing tests will be made following installation of the equipment and prior to drilling out. Pennzoil may specify additional tests prior to penetrating a known abnormally pressured zone, or any other time considered necessary. Details of inspection, test pressures, and test periods will be furnished by Pennzoil's foreman.

Careful alignment of rig must be maintained to prevent excessive wellhead and casing wear.

Preventers must be actuated with sufficient frequency to insure all equipment is in proper working condition at all times.

Operation and testing of preventer equipment and casing must be recorded on the daily drilling tour sheets, unless Pennzoil provides special forms for this purpose.

TRAINING RIG CREWS FOR OPERATION OF BLOWOUT EQUIPMENT

It is the Contractor's responsibility to assure that each crew is well trained, familiar with installation, maintenance, and operation of all blowout prevention equipment. It is also the Contractor's responsibility to see that adequate drills are conducted to assure that all crews are competent and capable of handling any potential blowout.

If Contractor has a standard drill procedure, this should be used. Otherwise, Contractor's and Pennzoil's foremen should agree on a procedure to be followed.

RECEIVED

DEC 23 1986

OCD
HOBBS OFFICE

EXHIBIT J (Continued)

INDICATION OF EMERGENCY

There are numerous signs which may indicate an approaching emergency. If these signs are detected in time and recognized as a warning, there is no valid reason for a well getting out of control. All crew members must always be alert and trained to recognize these signs.

Listed below are a number of indications which may be forerunners of trouble, and must be checked out when they occur:

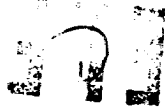
1. Fluid rise in pits (which indicates well is unloading) may be caused by (1) hydrostatic mud weight being too light, (2) formation fluid or gas entering bore hole, (3) accumulation of air from past trip being circulated to surface, or (4) lost circulation zone flowing mud back into bore hole during trip.
2. Increase in pump speed or decrease in pump pressure while drilling may be caused by (1) formation fluid or gas entering the bore hole and lightening the mud column, (2) mud pump not functioning properly, or (3) washed out drill pipe or drill collars.
3. A drilling break in a known or suspected productive interval.
4. Mud continuing to flow from bore hole after pumps are stopped may be caused by (1) formation fluid or gas entering bore hole, or (2) from an unbalanced mud column (heavy mud having been pumped into drill pipe and lighter mud in the annulus).
5. Continued flow of mud from drill pipe when tripping, or drill pipe failing to dry up when pulling.
6. Decrease in mud weight because of gas cutting.
7. Hole not taking proper amount of mud when tripping out of the hole may be caused by (1) swabbing action of drill string and bit, or (2) an insufficient mud weight over-balance on formation when pump is taken off the hole.
8. Loss of circulation, causing a lowering of fluid in the hole, which decreases hydrostatic pressure and may allow formation fluid or gas to enter the bore hole.
9. While drilling, circulating, or tripping, any unusual condition occurring which cannot be quickly identified or explained.

EMERGENCY PROCEDURE

When the driller has decided a blowout threatens from any of the above-mentioned items, he should follow procedures used in blowout prevention drills. In addition, he should contact his supervisor as soon as possible, who in turn should contact Pennzoil's supervisor.

Contractor's and Pennzoil's supervisors should agree in advance on procedures to be followed. If agreed upon, Pennzoil's "Emergency Procedure for Blowout Prevention" and "Kick Control Work Sheet" should be posted at the well.

18-01-10-87



RECEIVED

DEC 23 1986

OCD
HOBBS OFFICE