N. M. OIL CONS. COMMISSION
P. O. BOX 1980
HOBBS, NEW MEXICO 88240

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

30-025-29654

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL: OIL WELL [X] GAS WELL [ ] OTHER ____ SINGLE ZONE [ ] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR: Pennzoil Company

3. ADDRESS OF OPERATOR: P. O. Drawer 1828, Midland, TX 79702-1828

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface: 660' FSL & 1980' FWL of Section 30, T19S, R34E
At proposed prod. zone: SAME

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*: Approximately 25 miles west of Hobbs, New Mexico

5. LEASE DESIGNATION AND SERIAL NO.: NM - 056376

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Mescalero "30" Fed.

9. WELL NO.: 2

10. FIELD AND POOL, OR WILDCAT: Apache Ridge (Bone Spring)

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 30, T19S, R34E

12. COUNTY OR PARISH: Lea | 13. STATE: NM

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any): 660'

16. NO. OF ACRES IN LEASE: 320

17. NO. OF ACRES ASSIGNED TO THIS WELL: 40

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.: 2310'

19. PROPOSED DEPTH: 9,600'

20. ROTARY OR CABLE TOOLS: Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.): 3632 G.L.

22. APPROX. DATE WORK WILL START*: 3-1-86

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2	13-3/8	48	400'	500 sx, circ.
11	8-5/8	28	4,000'	1200 sx, circ.
7-7/8	5-1/2	17	9,600'	350 sx

Plan to drill and complete a 9,600' development well to the Bone Spring oil zone. Bottom hole location to be essentially the same as surface location and true vertical depth the same as measured depth. Blow out equipment to be as per attachments 1, 2 and 3.

List of Attachments:
1) BOP Attachments 1, 2 & 3
2) Multipoint Surface Use & Operations Plan
3) Compliance With Onshore Oil & Gas Order No. 1
4) Plat (NMOCD Form C-102)
5) Exhibit "A" (Proposed Location and Access Road)
6) Exhibit "B" (Location of Existing Wells)
7) Exhibit "C" (Well Site and Rig Layout)

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. 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.

24.
SIGNED Dennis P. Rodrigue TITLE Adv. Engr. Tech. DATE 2-18-86

(This space for Federal or State office use)

PERMIT NO. ____ APPROVAL DATE ____

APPROVED BY ____ TITLE ____ DATE 3-5-86

CONDITIONS OF APPROVAL, IF ANY:

APPROVAL SUBJECT TO GENERAL REQUIREMENTS AND SPECIAL STIPULATIONS ATTACHED

NE MEXICO OIL CONSERVATION COMMISSION

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	Lease	Well No.
PENNZOIL COMPANY	MESCALERO 30 FEDERAL	2

Unit Letter	Section	Township	Range	County
N	30	19 SOUTH	34 EAST	LEA

Actual Footage Location of Well:
660 feet from the SOUTH line and 1980 feet from the WEST line

Ground Level Elev.	Producing Formation	Pool	Dedicated Acreage:
3632.0'	Bone Spring	Apache Ridge Bone Spring	40 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.

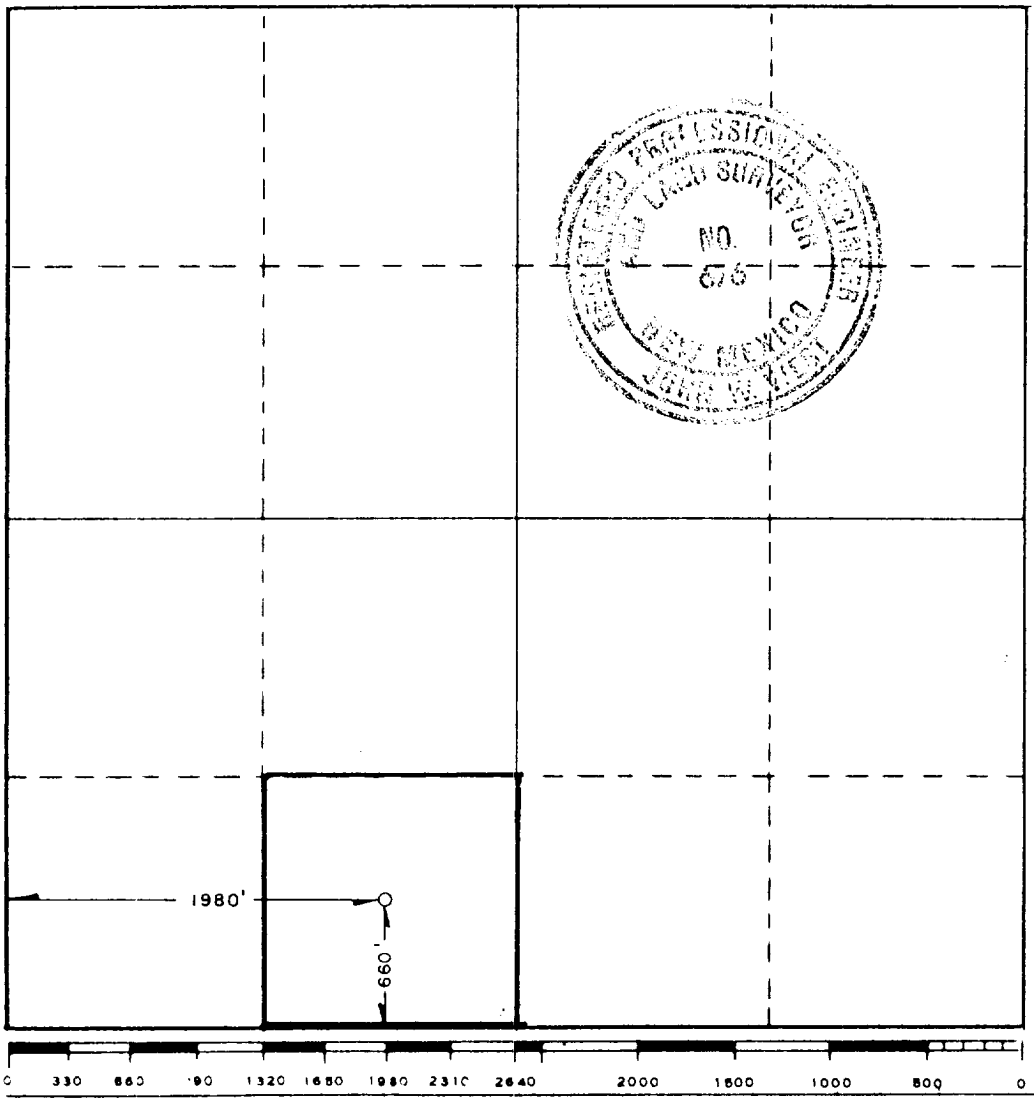
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

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.

Name: Francisco P. Rodriguez

Position: Adv. Engr. Tech.

Company: Pennzoil Company

Date: 1/28/86

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: JANUARY 16, 1986

Registered Professional Engineer and/or Land Surveyor

Certificate No. JOHN W. WEST, 676
RONALD J. EIDSON, 3239

NMOCD - Hobbs

United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Roswell District Office
P. O. Box 1397
Roswell, New Mexico 88201

IN REPLY
REFER TO:

NM-056376-PD
3162.41 (065)

MAR 0 5 1986

Pennzoil Company
P. O. Drawer 1828
Midland, Texas 79702-1828

Gentlemen:

Your application for Permit to Drill well No. 2 Mescalero "30" Federal in the SE¼SW¼ sec. 30, T. 19 S., R. 34 E., Lea County, New Mexico, lease NM-056376, to a depth of 9,600 feet to test the Bone Spring formation in the oil-potash area, is hereby approved as amended by stipulations attached to the application.

One copy of the application is returned herewith. Please notify the Bureau of Land Management office checked on the attached special stipulation, in sufficient time for a representative to witness all cementing operations.

Sincerely,

Orig. Sgd. Francis R. Cherry, Jr.

Francis R. Cherry, Jr.
District Manager

Enclosure

ATTACHMENT NO. 1
(See Section 4)
Page 1 of 1

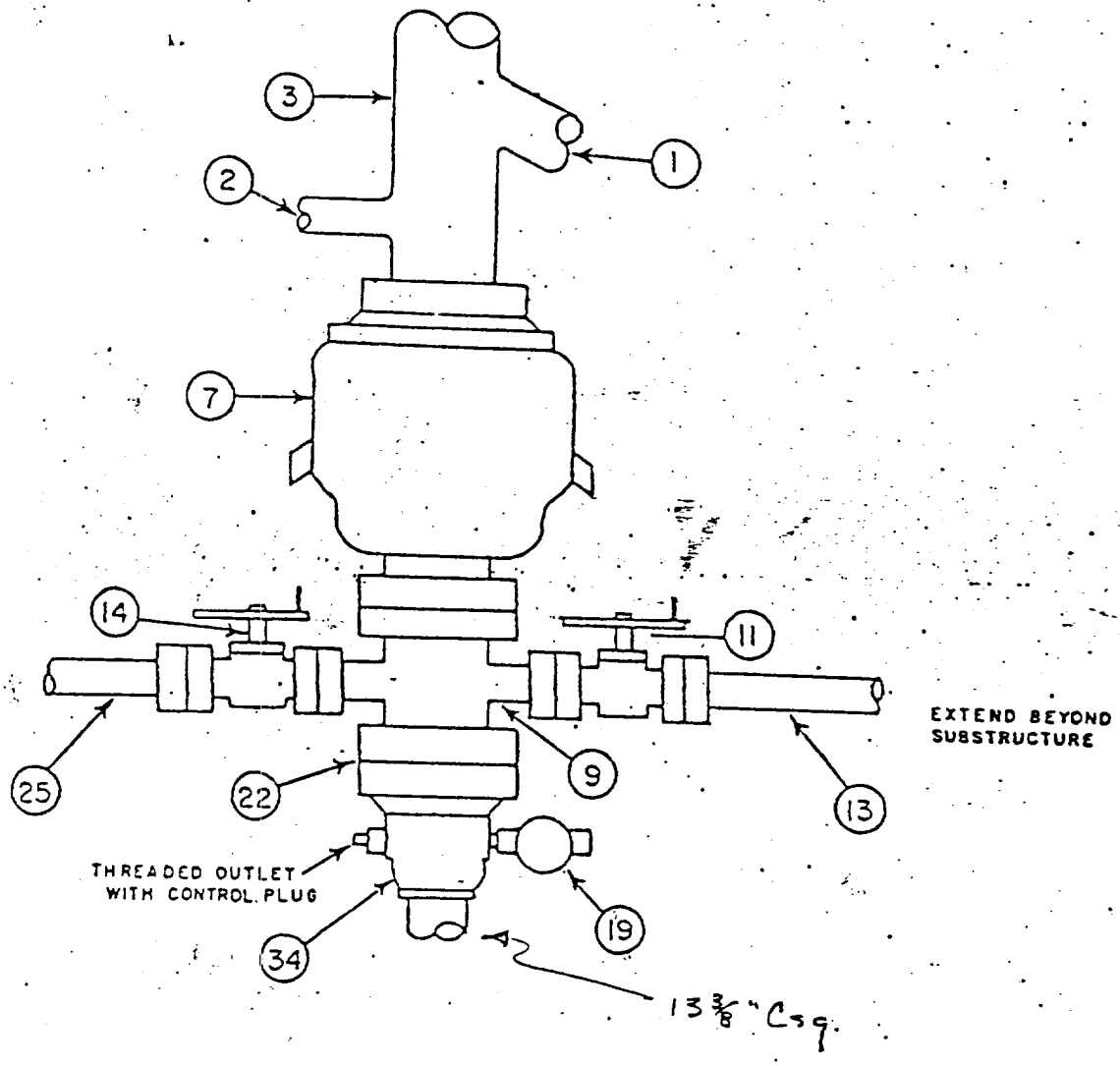
CHECK LIST AND DRAWINGS (ATTACHED)
MINIMUM BLOWOUT PREVENTER EQUIPMENT REQUIREMENTS
(ATTACHMENT NO. 2 TO BID SHEET AND WELL SPECIFICATIONS)
3000 PSI WORKING PRESSURE
TO BE INSTALLED AFTER SETTING 13 3/8 INCH CASING

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.	Bell Nipple	12"	Weld	125	X	
4.	Rotating Head					
5.	Hydraulically Operated Gate Valve					
6.	Blooie 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.	Preventer Side Outlets, _____ in. and _____ in. Use as alternate to No. 9 above.					
11.	Gate Valve	2"	Flanged	3000	X	
12.	Hydraulically Operated Gate 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. Use as alternate to No. 17 above.					
19.	Gate Valve					
20.	Hydraulically Operated Gate Valve					
21.	Relief Line					
22.	~~Wear~~ Flange or ~~Bushing~~ FOR 13 3/8" csg	12"	Threaded	3000	X	
23.	Kill Line to accessible location approx. _____ ft. from rig.					
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.	Half Union					
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 preventer sizes to be bore dimension.

Pennzoil Company



ATTACHMENT NO. 2
(See Section 4)
Page 1 of 1

CHECK LIST AND DRAWINGS (ATTACHED)
MINIMUM BLOWOUT PREVENTER EQUIPMENT REQUIREMENTS
(ATTACHMENT NO. 2 TO BID SHEET AND WELL SPECIFICATIONS)
5000 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	2"	Weld	125	X	
4.	Rotating Head	8"	Flanged	5000	X	
5.	Hydraulically Operated Gate Valve					
6.	Blooie Line					
7.	Bag Preventer	8"	Flanged	5000	X	
8.	Hydraulically Operated Ram Preventer or rotating head					
9.	Drilling Spool with 2 in. and 2 in. Side Outlets	8"	Flanged	5000	X	
10.	Preventer Side Outlets, 2 in. and 2 in. Use as alternate to No. 9 above.	8"	Flanged	5000	X	
11.	Gate Valve	2"	Flanged	5000	X	
12.	Hydraulically Operated Gate Valve					
13.	Line to Choke Manifold	2"	Flanged	5000	X	
14.	Gate Valve	2"	Flanged	5000	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. Use as alternate to No. 17 above.					
19.	Gate Valve	2"	Flanged	5000		X
20.	Hydraulically Operated Gate Valve					
21.	Relief Line					
22.	Wear Flange or Bushing	NA				
23.	Kill Line to accessible location approx. ____ ft. from rig.					
24.	Gate Valve					
25.	Kill Line to rig pump manifold	2"	Flanged	5000	X	
26.	____ Way Cross, ____ in. x ____ in. x ____ in. x ____ in.					
27.	Tee, in. x in. x in.					
28.	Half Union					
29.	Casing Spool					
30.	Gate Valve					
31.	Casing Spool					
32.	Gate Valve					
33.	Pressure Gauge					
34.	Casing Head	8"	Flanged	5000		X
35.	Gate Valve					
36.	Gate Valve					

*Line sizes to be inside diameter.
Valves, spools and preventer sizes to be bore dimension.

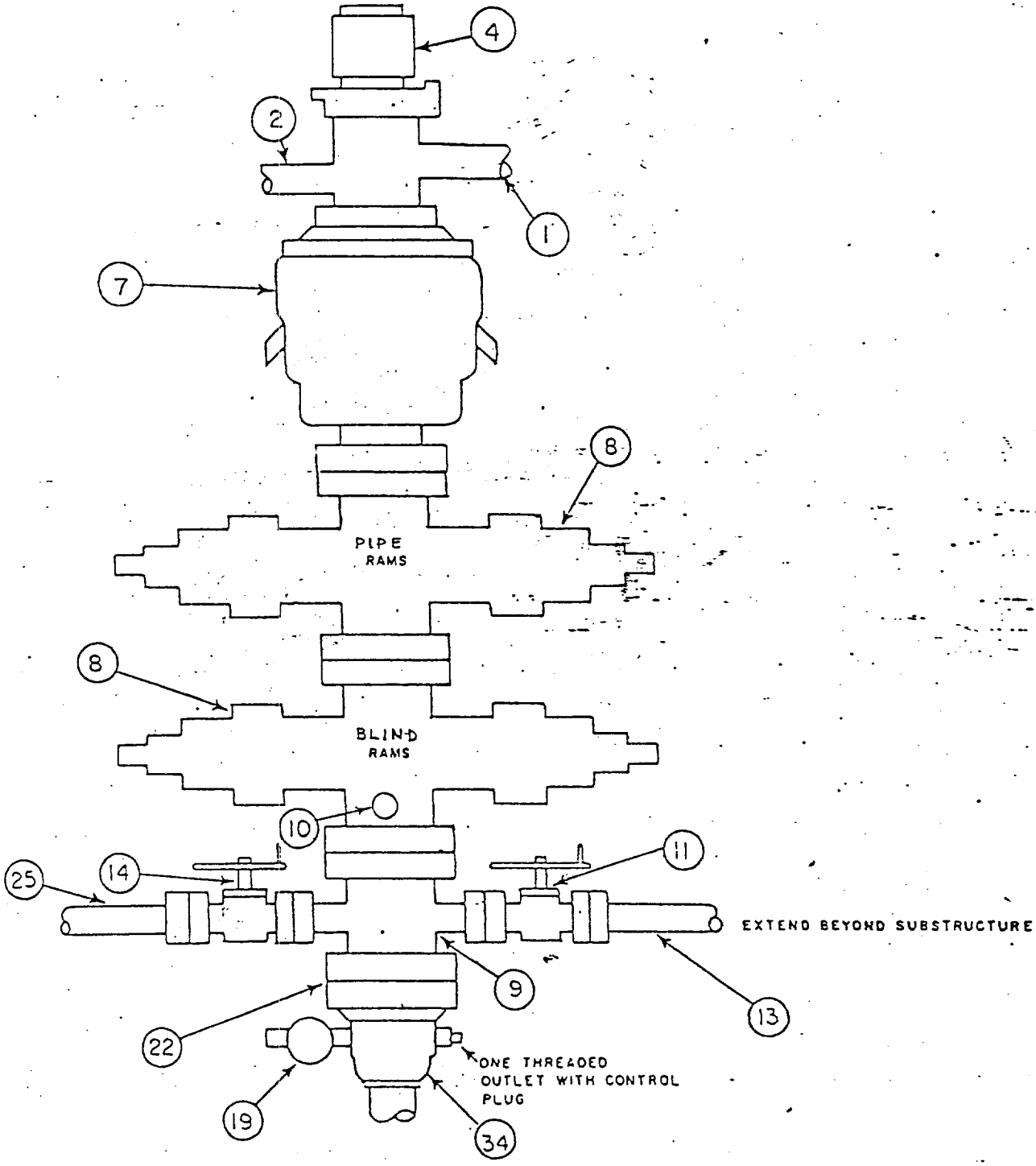
AUXILIARY EQUIPMENT TO BE FURNISHED BY CONTRACTOR OR PZL AS CHECKED (X)

ITEM	Furnished By: Contr.	Furnished By: Pzl.
Automatic Accumulator and Master Control. See below for details.	X	
Remote set of closing unit controls with 2 stations	X	
Bag Preventer Pressure Regulating Control Valve on remote station	X	
Kelly Cocks: Upper – Make ____ Press. Rating 5000 Lower – Make Press. Rating	X	
Inside Blowout Preventer: Gray/Shaffer ____ PSI WP Drop-In (Hydril) PSI WP		
Full Opening Ball Valve for each size drill pipe in use (Extra Lower Kelly Valves) 5000 PSI WP	X	
Circulating Head for each type and size of tool joint in use	X	
Ft. of 2 in. steel hose (Chicksan) PSI WP		
Blind/~~Shear Ram~~		

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

X	ITEM
X	Accumulator Volume 80 gal., 3000 PSI WP Unit
X	Power for Pumps: Air X Air and Electric
X	SUFFICIENT TO RECHARGE COMPLETE UNIT IN 6 MINS. Pumps Capacity Gal/Min at PSI
X	Number of Control Valves Required 3
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 0,9 inch minimum ID and have 5000 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.
X	Bottled Nitrogen ____ Bottles ____ ft³ each at ____ psi manifolded to by-pass accumulator and operate BOP directly.

Pennzoil Company



CHECKLIST AND DRAWING
MINIMUM CHOKE MANIFOLD EQUIPMENT REQUIREMENTS
(ATTACHMENT 3-TO BID SHEET AND WELL SPECIFICATIONS)

5000 PSI WORKING PRESSURE

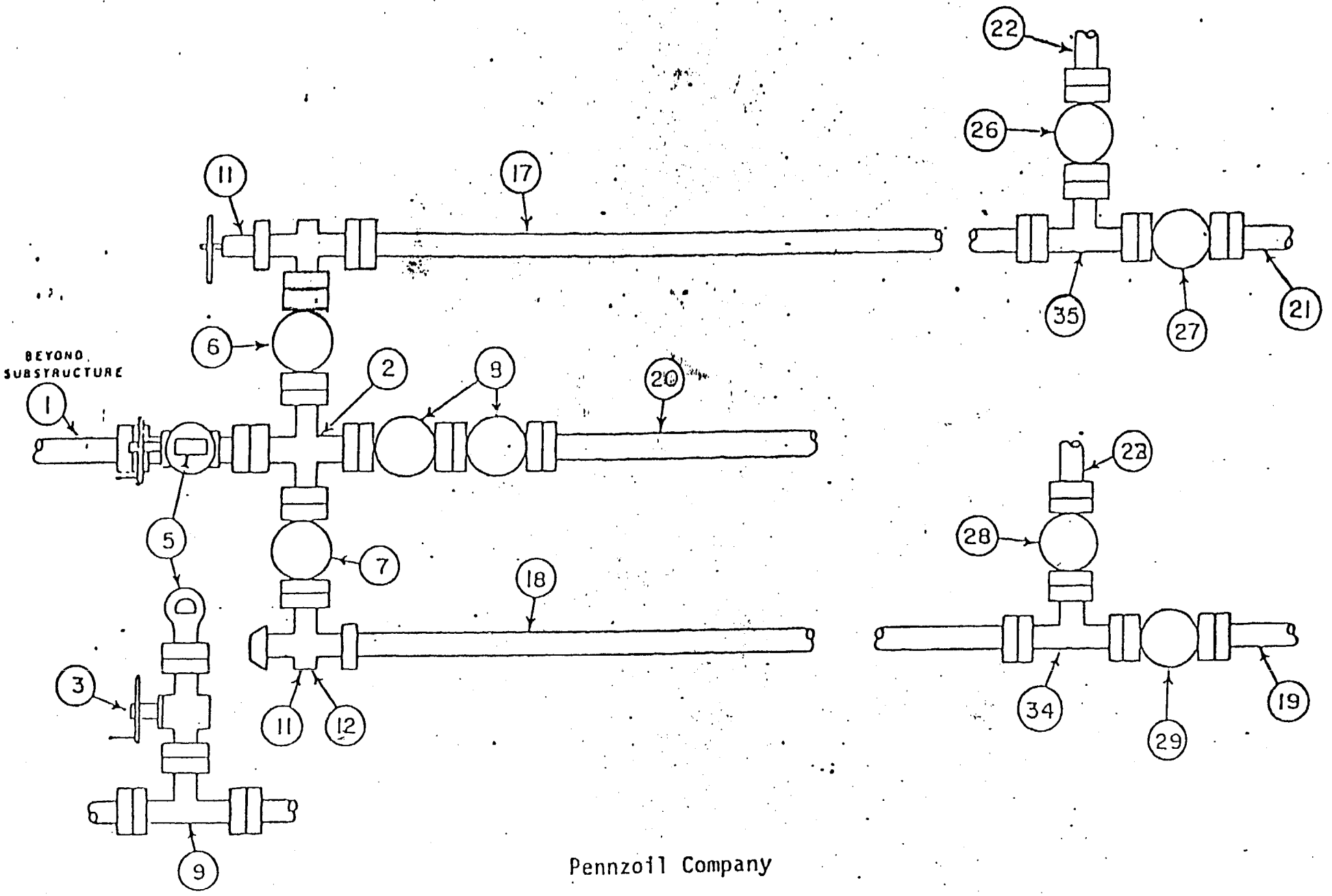
TO BE INSTALLED AFTER SETTING 8 5/8 INCH CASING

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 stack (same as Item No. 13 on Attachment 2)	2	Weld or Flge	5000	X	
2	Way Cross, 2 in. x 2 in. x 2 in. x 2 in.	2	Flge	5000	X	
3	Gate Valve	1 3/16"	Flge	5000	X	
4	Pressure Sensor					
5	Pressure Gauge	1	Thd	5000	X	
6	Gate Valve	2	Flge	5000	X	
7	Gate Valve	2	Flge	5000	X	
8	Gate Valve	2	Flge	5000	X	
9	Way Cross, in. x in. x in. x in.					
10	Way Cross, in. x in. x in. x in.					
11	Adjustable Choke	2	Flge	5000	X	
12	Positive Choke	2	Flge	5000	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	1000	X	
18	Line to Low Pressure Header	2	" "	1000	X	
19	Line to Burn Pit	2	Weld on thd	1000	X	
20	Line to Burn Pit	3	Weld	1000	X	
21	Line to Reserve Pit	2	Weld on Thd	1000	X	
22	Line to Mud Pit	2	Weld on Thd	1000	X	
23	Line to Mud/Gas Separator	2	Weld or Thd	1000	X	
24	Header					
25	Header					
26	Gate Valve	2	Flge	1000		X
27	Gate Valve	2	Flge	1000		X
28	Gate Valve	2	Flge	1000		X
29	Gate Valve	2	Flge	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.	2	Flge	1000		X
35	Tee 2 in. x 2 in. x 2 in.	2	Flge	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.					
44	Gate Valve					
45	Gate Valve					
46	Gate Valve					

*Line sizes to be inside diameter.
Valves, spools and preventer sizes to be bore dimension.
Header size to be outside diameter.

1. All connections on the BOP stack shall be flanged or bolted ring clamp of comparable rating.
2. All 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 100' ft. from the well bore. 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 heating 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.
    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 unavoidable 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. Water lines 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.



Pennzoil Company

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 Pzl. The applicable BOP and Manifold drawing shall be furnished 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 which time the entire BOP stack with manifold is to be completely assembled, installed, pressure tested, performance tested, 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. Pzl 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 Pzl'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 Pzl 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 Pzl's foreman should agree on procedure to be followed.

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), hydrostatic mud weight may be too light; formation fluid or gas entering bore hole; accumulation of air from past trip being circulated to surface; or 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 formation fluid or gas entering the bore hole and lightening the mud column; mud pump not functioning properly; or 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, (1) may be caused by formation fluid or gas entering bore hole; (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 swabbing action of drill string and bit; or 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. Any unusual condition occurring while drilling, circulating or tripping 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 Pzl's supervisor.

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