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.