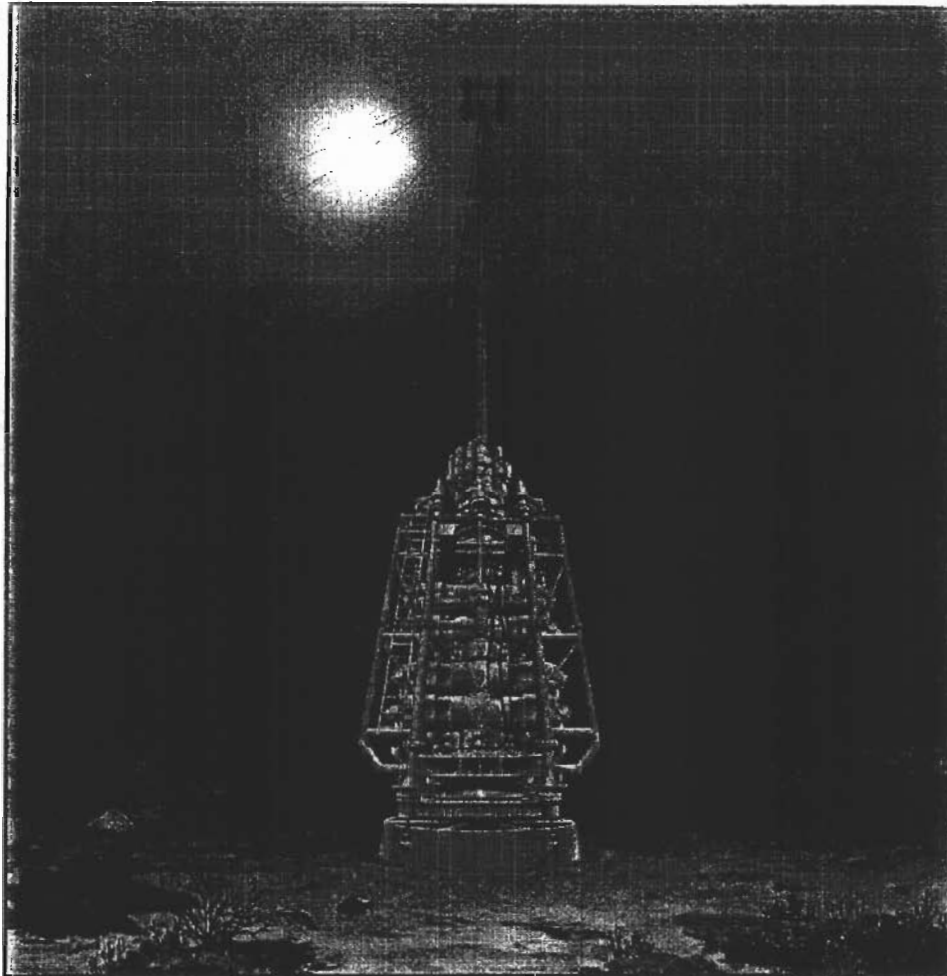




DEEPWATER HORIZON TL BOP STACK Operation and Maintenance Manual



TC1507



5413
Exhibit No. _____
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11. Pack the cavity around the head of each actuator screw with clean grease.
12. Close the access flaps of the top trash seal.
13. Reinstall the pipe plugs which were removed to vent the operating system. Use TFE thread-sealing tape on the plugs.
14. Verify operation of the BOP.

V. Operation Procedures

A. Normal Operation

1. Operating Pressure C General Recommendations
 - a. A minimum closing pressure of 1500 psi (103.4 Bars) is required to close and seal the BOP on pipe. Higher closing pressures [up to the rated working pressure of 3000 psi (206.8 Bars)] may be necessary, depending upon packer condition, pipe size, and ambient temperature. Neither the operating system nor the packer will be damaged by application of up to 3000 psi (206.8 Bars) closing pressure.
 - b. Closing pressure should never be reduced below 1500 psi (103.4 Bars), except when stripping. It is only during stripping that reduced closing pressure is beneficial in prolonging packer life.
 - c. A minimum opening pressure of 1500 psi (103.4 Bars) is required for reliable operation. The operating system will not be damaged by repeated application of up to 3000 (206.8 Bars) psi opening pressure.
2. Closing the BOP on pipe or tools
 - a. To close the BOP on pipe or tools, apply closing pressure while venting the opening port.
 - b. If well fluid leaks past the packer, increase closing pressure as necessary until the leakage stops, but do not exceed 3000 psi (206.8 Bars).
 - c. Closing pressure must be continuously applied in order to hold the packer in the closed position.
3. Closing the BOP on open hole
 - a. To close the BOP on open hole, apply the maximum available closing pressure [not to exceed 3000 psi (206.8 Bars)] while venting the opening port.