



# Safety Alert

From the International Association of Drilling Contractors

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ALERT 98-16

## Stored Energy Hazards

A rig worker was seriously injured when the cap at the end of a top drive accumulator blew off and struck him. He had been helping another employee remove the cap, unaware that the nitrogen pre-charge in the tube was still active. Because it had not been bled off, the pressure was sufficient to violently blow off the end cap.

Rigs have a variety of equipment that contains "stored energy." This can be in the form of electrical energy, such as in generators. It may also be in the form of mechanical energy, such as compressed or torqued springs. Or it may be present in the form of pressurized energy, as with the accumulator end cap. As with work requiring "lock-out/tag-out" procedures, one should never assume that the energy stored within a mechanism has been released. All employees should confirm that any stored energy is released before working on a device.

A good practice is to review the equipment on each rig to identify those devices which may contain stored energy. These devices should be marked with a painted or stenciled warning that stored energy should be safely dissipated before any work is performed.

Some equipment is designed to be repaired and maintained only by properly qualified specialists. In no case should an employee attempt to disassemble any of this equipment unless they are properly qualified and have confirmed that any stored energy has been released.

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**The Corrective Actions stated in this alert are one company's attempts to address the incident, and do not necessarily reflect the position of IADC or the IADC HSE Committee.**

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