Safety Alert

MMS

U.S. Department of the Interior Minerals Management Service Gulf of Mexico OCS Region

Safety Alert No. 262 30 April 2008 Contact: Randall Josey (504) 736-2409

Sudden Crane Boom Crash Injures One

A crane was being used in a well plug & abandonment (P&A) operation. While lifting an indicated 12,000 lbs to test a casing cut, the boom cable failed catastrophically and the boom dropped, injuring a crewman.

An MMS investigation into this crane accident indicated that the failure was caused by <u>multiple</u> <u>maintenance issues</u>, <u>inspection deficiencies</u>, and <u>improper crane usage</u> as follows:

- The boom cable was severely worn, flattened and rusted for more than 50 feet;
- Where pinned, the cable was rusted with random broken wires;
- The lead sheave in bridle was not rolling free;
- The weight indicator was improperly secured and possibly incapable of accurate measurements because of an improper screw setting;
- An additional load was being applied to the crane that was not accounted for by the weight indicator due to the auxiliary hoist being used to secure the arm of the power swivel;
- The maximum crane load rating at the angle used was less than the load applied.

Because three serious accidents have occurred recently, the MMS recommends the following:

- that the lease operator verify that crane and wire rope inspections and maintenance are being performed as per regulations;
- lease operators thoroughly inspect the equipment, including sheave condition, prior to being used during a crane-based P&A operation;
- lease operators should review the specific lifting procedures to ensure that the integrity of the equipment is not compromised by over-load conditions at any time;
- lease operators should verify that load rating charts are correct and weight indicators are functioning properly; and
- lease operators should ensure that no additional loads are being applied to the crane that are not detected by the load indicator.