

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

Safety Alert No. 208 December 19, 2002 Contact: Cliff Delouche (337) 289-5103

## Loss of Well Control

Recently, a kick was observed during the wash-over of a gravel pack. Observed pressures were 1,100 psig on the casing and 1,800 psig on the workstring. Well-control operations were initiated by bull-heading into the well, at which time pressure rose to 4,200 psig. The PSV located on the mud pump relieved, allowing a mixture of gas, sand, and completion fluid to escape and inundate the area around the drill floor and rig equipment. On at least two occasions prior to the incident, the PSV had been subjected to pressures at or near its set pressure of 5,000 psig during BOP tests.

It was concluded in an MMS investigation of the incident that the PSV shear pin failed below its set pressure because of a possible deformity of the pin resulting from repeated exposure to pressures at or near its set pressure during testing. It was further concluded by MMS that an apparent failure to inspect the shear pin visually after such pressure exposures would have revealed the aforementioned deformity and thus represents a possible contributing cause of the incident.

It is therefore recommended to operators and contractors that:

- 1. PSV shear pins should be visually inspected for integrity after having been exposed to pressures at or near their relief pressures.
- 2. PSV's should be maintained in accordance with manufacturer's recommendations.
- 3. PSV discharges should be piped to a safe location so as to minimize interference with operations.

For details of the accident, see <u>OCS Report MMS 2002-040</u>. Copies of the report may be obtained from the MMS Public Information Office located at 1201 Elmwood Park Boulevard, New Orleans, Louisiana 70123 (1-800-200-GULF or local 504-736-2519).

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