MMS Safety Alert

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

Notice No. 076

October 6, 1978

OCS Operations Safety Alert

Injury -- Glass Liquid Level Gauge Ruptures

Recently, a field worker was severely injured when the sight glass in a liquid level gauge burst.

The gauge was installed on a high pressure separator. Just prior to the accident the employee had cleaned the glass portion of the gauge. He was opening the gauge valve to return the unit to service when the glass shattered. Glass projections struck him the face, neck, hand, and chest, causing severe facial lacerations and the loss of one eye.

The investigation revealed that the separator was operating at a pressure of 1220 psi at 76 F. The rating of the glass gauge was not stamped on the unit, however, when determined through the vendor's catalog it was found to be 750 psi at 100 F.

To prevent similar accidents in the future, the operator has instructed all personnel as follows:

1. Only components adequately rated for the application will be installed. The ratings of all liquid level gauges shall be stamped on the device in order that it can be readily checked by field personnel.

2. Operations which involve pressurizing liquid level gauges should be conducted from the side rather than from the front of the unit.

3. Personnel will wear safety glasses when working.

Additional precautions recommended by the USGS are:

1. Armored, not tubular, sight gauges should be utilized on vessels subject to occasional high pressure surges.

2. Equip all tubular sight gauges with a stainless steel expanded metal guard.

3. Since the rated pressure of tubular sight gauges is not stamped on the unit, instruct personnel on the difference of construction between low and high pressure gauges. See Figures 1 and 2 below.

Attachment

[signed] D.W. Solanas

Oil and Gas Supervisor

Operations Support

Gulf of Mexico Area