



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

Notice No. 148

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Pipe Nipple Fatigue and Inadequate Insulation Cause Compressor Fire

A fire occurred on a compressor when an all-thread nipple connecting the level safety high sensor to the interstage suction scrubber broke. Gas escaped, contacted the compressor turbocharger, and ignited. The fire intensified when oil filters and V-belts stored in the compressor building ignited. Platform personnel activated the emergency shut-down system; however, the diesel engine for the fire water pump failed to start. The fire was fought initially with dry chemical units. Workover rig personnel subsequently hooked up the deep well pump to the fire fighting system and extinguished the fire in 35 minutes. It was determined later that the batteries that start the diesel engine were unable to provide the necessary voltage to activate the start cycle, even though the batteries were equipped with a charging device. Damage occurred to the compressor, compressor engine, building, and shelf storage items.

To prevent a recurrence of this type of accident, the operator has taken steps to:

1. Institute weekly maintenance and performance checks to ensure adequate battery supply.
2. Remove all storage items such as oil filters and V-belts from the compressor building.
3. Insulate the turbocharger and engine exhaust.