



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

Notice No. 134

February 8, 1985

OCS Operations Safety Alert

Pipeline Pump Fire

A recent fire on the Outer Continental Shelf in the Gulf of Mexico was caused by oil spraying from a leak in a pipeline pump onto its drive engine.

The cage on the low pressure pump suction valve came loose and lodged between the pump plunger and pump cylinder head shattering the ceramic coating on the pump plunger. This allowed oil to flow around the pump plunger, force the rod packing cover plate off, and spray on the engine resulting in the fire. Investigation revealed that the engine exhaust was properly insulated. The ignition source has not been determined. The fire lasted about 20 minutes.

Personnel at the facility assisted in extinguishing the fire, using portable dry chemical extinguishers, wheel units, and light water. Two employees received minor injuries. Equipment damage was mainly to the pump and its drive engine, and was estimated at \$25,000.

To prevent a recurrence of a similar type incident, the operator will survey his fields to ensure that rod packing cover plates on all pumps will be secured to the pump housing. This will prevent the cover plate from being forced off, allowing oil to be sprayed to the atmosphere. Additionally, spacers will be installed on all pumps to increase the separation between the pump cylinder head and the end of the pump plunger. This will prevent the pump plunger from striking parts that may inadvertently come loose internally.

[signed] D.W.]Solanas

Regional Supervisor

Rules and Production