

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

Notice No. 136

February 11, 1985

OCS Operations Safety Alert

Air Volume Tank Explosion

An air volume tank on a production platform located on the Outer Continental Shelf in the Gulf of Mexico exploded. The accident occurred when an end plate blew out of an 80-gallon air volume tank after the tank was pressurized to 110 psi to begin sandblasting and painting. The end plate hit a

4-ton air compressor and moved it approximately 8 inches.

Inspection revealed that the welds on the end plates lacked full penetration, and the plates used for the ends of this tank were flat and not dished end caps as they should have been. The weld on the end plate still in place was cracked almost entirely around its circumference.

Although this volume tank was hydrostatically tested in 1984 to twice its working pressure (120 psig working tested to 240 psig), the end plate still failed in extended service.

To prevent a recurrence of this type of accident, the operator will inspect all air volume tanks of this type used for sandblasting/painting operations to make sure they have the proper ends and ensure that they are coded vessels. Any vessel not meeting these requirements will be replaced with an approved vessel.

[signed] D.W. Solanas

Regional Supervisor

Rules and Production