



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

Notice No. 119

October 3, 1983

OCS Operations Safety Alert

Successful Diverter System Operation to Control Shallow Gas Flow

A trip out of the hole was necessary to change the bottom-hole assembly while directionally drilling a pilot hole to surface casing setting depth with a platform rig on a development well. The well was circulated, drill pipe slugged, and three stands were pulled when the well began to flow. Drill pipe was being run back to bottom when a gas bubble reached the surface and sprayed mud out of the annulus. The diverter system was actuated as the platform was being evacuated, and all engines and power were shut down. The well flowed gas through the diverter system vent lines for approximately 10 minutes and the hole bridged. The platform was reboarded, mud pumped into the annulus, drill pipe backed off, and fishing operations attempted unsuccessfully. The well was later plugged back with cement into conductor casing and sidetracked to surface casing setting depth.

No personal injury, property damage, or oil pollution occurred during this successful diverter operation.

The causes of the gas flow and associated problems are believed to have been in the swabbing in of the pilot hole due to the bit and/or stabilizers becoming balled up with gumbo causing bottom-hole assembly drag in the hole.

To prevent a recurrence of this type of incident, the operator plans to:

1. Increase mud weight slightly to enhance well control.
2. Monitor and control drilling rate and drilling mud properties.
3. Pull drill pipe out of the hole slowly and closely monitor fill up.

[signed] D.W. Solanas

Regional Supervisor

Offshore Operations Support