

SEALMAKER International Ltd.
CID Umbilical Leak Repair

JOB RECAP: 27 April 2007
Company: DEEP GULF ENERGY
Location: Gulf of Mexico Tiger Project
Ewing Banks 947 20-Mile Umbilical Tie-Back

OBJECTIVE:

Repair Leak on 3/8" I.D. Chemical Injection Downhole Line (CID) using SEALMAKER International Differentially Activated Sealant to cure 1.5 gpm leak condition(s) on the Hydraulic Flying Lead (HFL) connectors at the Subsea Umbilical Termination Assembly (SUTA) and/or the Subsea Tree from the Ewing Banks 947 Platform via 104,000' umbilical tie-back at 2000' (609m) water depth.

SUMMARY:

The CID Line was successfully repaired and returned to service using the **SEALMAKER International Differentially Activated Sealant** on 26 April 2007. The CID, a METHANOL Chemical Injection Line Downhole was leaking at the rate of 1.5 gal/min (5.7 Liters/min) at 7500psig. Required integrity was 14,200psig with FWHP of 9,800psig. Diagnostics were performed prior to sealing operations and determined that the leak was at or near 609m depth based on pressure data and flow back analysis. The control line was .375" ID.

Three pump sequences were required to completely seal the leak in the CID. The first run was performed by injecting 40 Liters SEALMAKER™ displaced to the leak site with TransAqua C/L Fluid. Injection pressure increased to 11,720 during the first run indicating that a preliminary seal had been established. Two subsequent chemical injections resulted in completely sealing the leak at 14,200psig. The CID valve was then opened hydraulically and 8 Liters SEALMAKER™ was displaced through the SUTA, the National Couplers on the HFL and then through the CIDV valve and into the wellbore. The valve opened normally and was confirmed by pressure drop as the valve opened into wellhead pressure. After completing the sealant operation and pressure testing, the CID was immediately put back into Methanol injection with zero leakage.