

1. **Well Name:** Kept confidential as per operator's request
2. **Field/Block Name:** Kept confidential as per operator's request
3. **State & Country:** Angola, Africa
4. **Onshore or Offshore:** Offshore
5. **Hole Sizes, Intervals where Liquid Casing-Coarse used:** 12 ¼" hole.
6. **Rates of Losses before spotting the Liquid Casing Pill:** Total losses with no return.
7. **Operator Name:** TOTAL (A French oil giant)
8. **Mud Company name:** MI Drilling fluids
9. **In which Mud System Liquid Casing-Coarse is used:** water based polymer mud
10. **Date of the using the LCM Pill:** Year 1999.
11. **Dosage of Liquid casing-Coarse used in the pill:** 50 ppb
12. **Mud Density:** 10.5 ppg

#### **Brief Description of the Job Performed:**

Highly fragmented limestone formation resulted in total losses while drilling. TOTAL with their past experience using Liquid casing products ordered urgently with service Engineer and our service Engineer mixed and pumped Liquid casing pills (2X 100 bbl) and losses were completely cured. Later the operator used Liquid Casing-Fine with 3-4 ppb in active mud system and wells drilled smoothly. Total continued to use our products for many years.