

1. **Well Name:** Well Name withheld
2. **Field/Block Name:** Avery island, Los Angeles
3. **State & Country:** Los Angeles, USA
4. **Onshore or Offshore:** Onshore
5. **Hole Sizes, Intervals where Liquid Casing-Coarse used:** 8 ½" Section, around 3,000'
6. **Rates of Losses before spotting the Liquid Casing Pill:** Total losses
7. **Operator Name:** CHEVRON Petroleum Corporation
8. **Mud Company name:** Baroid
9. **In which Mud System Liquid Casing-Coarse is used:** Oil based Mud
10. **Date of the using the LCM Pill:** 1999
11. **Dosage of Liquid casing-Coarse used in the pill:** 20 ppb in 9.8 ppg Oil Based Mud
12. **Mud Density:** 9.8 ppg

Brief Description of the Job Performed:

While drilling a directional hole with 37° angle, at 10,000' returns were lost. A LCM pill comprising Pheno-Seal, Mica & Nut Plug were pumped down hole with partial returns regained. However, severe torque and drag with partial losses made us difficult to drill further. At this stage, pumped a liquid casing pill with 20 ppb of Liquid casing-coarse in 9.8 ppg Oil based mud approximately at 3000'. Full returns were observed when the Liquid casing-coarse pill reached thief zone. Resumed drilling and while drilling another 60 bbl pill consist of 30 ppb Liquid Casing-coarse pumped to reduce torque and drag. Good reduction of torque and drag observed and with no subsequent losses. At this point, the whole mud system was treated with 5 ppb of Liquid casing-Fine and TD reached with out any problem. Several times triple combo logs were recorded with out any trip and logging tools went bottom perfect with no torque or drag. Used 70 mesh screens to retain the Liquid Casing-Fine in the system and optimum utilization of two centrifuges to control drill solids. Our (Chevron) experience shows that Liquid casing not only cures losses but also prevents losses and also reduce torque & drag and imparts lubricity too as solid lubricant.