TDI-Brooks Conducts Geotechnical Coring for Petrobras-America Inc. at their Cascade and Chinook Gulf of Mexico Developments

March 2007

In October 2006 TDI-Brooks was awarded a contract from PETROBRAS-America Inc. to conduct a geotechnical coring project for the "Cascade and Chinook Field Development and Export Pipeline Options in the Walker Ridge and Green Canyon Areas of the Gulf of Mexico." The project was conducted in three (3) separate cruise legs in October and December 2006 and March 2007, respectively. A total of approximately fifty-seven (57) regular 6-m, 2000-lb piston cores, fifty-five (55) 50-cm x 50-cm box cores and nineteen (19) Jumbo Piston Cores (JCPs) were acquired during the three (3) cruises. Water depths ranged from approximately 2,000 to 2,700 meters. The total value of the contract was $1.7 million.

The JPCing part of this overall project was conducted using the R/V BROOKS McCALL (**Figure 1**). **Figure 2** shows the JPC setup on the back deck of the R/V BROOKS McCALL. TDI-Brooks has setup the R/V BROOKS McCALL as its primary Gulf of Mexico coring vessel. It is fully mobilized for regular, box and JP coring.

The objective of the investigation was to conduct a shallow geotechnical site investigation-sampling program to determine the engineering properties of the shallow soils in the development and export pipeline areas. The geotechnical sampling programs comprised the following field operations:

- Jumbo Piston Cores, up to 60-ft penetration.
- Conventional Piston Cores, up to 20-ft penetration.
- Box cores with penetration between 24 and 36-inches.
- Surface and USBL positioning and survey services.

Offshore testing included MV/TV shear strength measurements down the conventional piston and JPC cores as well as the box cores. **Figure 3** shows the shear strength testing of the upper 50-cm in a large box corer. The onshore testing included basic index and advanced geotechnical testing. **Figure 4** shows the sites that were cored during the three cruises as part of this project in the Green Canyon and Walker Ridge lease areas of the northern Gulf.

The offshore geotechnical supervision, core assignments and engineering assessment was conducted by Geoscience, Earth and Marine Services (GEMS).

Additional details on the R/V BROOKS McCALL or TDI-Brooks Int'l Inc. can be found at www.tdi-bi.com.

Figure 1. The R/V BROOKS McCALL that TDI-Brooks has outfitted for geotechnical coring, including Jumbo Piston Coring in the Gulf of Mexico.

Figure 2. Jumbo Piston Coring (JPC) rigging on the R/V BROOKS McCALL.

Figure 3. Shear strength testing down 50-cm x 50-cm large box cores.

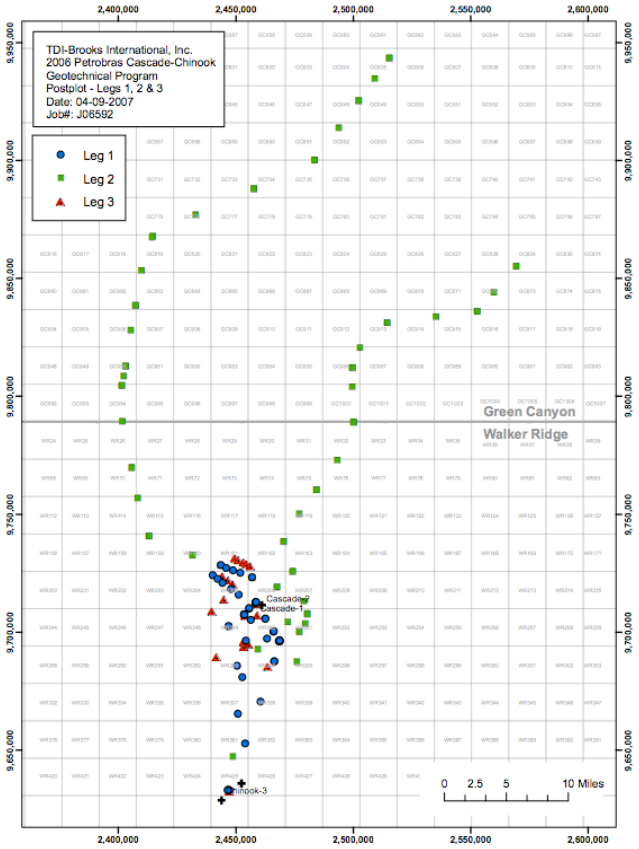

Figure 4. Locations of the regular and jumbo piston, and box cores collected.