

Halliburton Solution Profile

Drilling Waste Management

Halliburton's SupaVac™ SV400 Pumping System Helped Clean Mud Pits 65% Faster, Saving US\$ 6.3 MM of Rig Time

Location: Mariscal Sucre Project, Venezuela

OPERATOR'S CHALLENGE – PDVSA needed to periodically clean the mud pits during drilling fluid displacement operations on the Discoverer Neptune offshore rig. Up to 14 days were required to complete each cleaning job because it was difficult to access the tank bottoms and remove all fluids and settled material. The challenge was to provide a waste management solution that would accelerate the cleaning operation and significantly reduce downtime.

HALLIBURTON'S SOLUTION – SV400 pumping system which has the unique ability to vacuum recover and pressure discharge drill cuttings and drilling waste to virtually any location on the rig. The SupaVac system is intrinsically safe because it is fully pneumatically operated and contains no electrical components. Units can be placed almost anywhere on the rig, including hazardous zones.

The Baroid crew connected transfer hoses and vacuumed the tank bottoms. Inside the SupaVac SV400 unit, the cuttings and waste fluid were agitated and broken up with air to ensure they were fully fluidized. They were then blown pneumatically to cuttings boxes. A total of 25 m³ of water-based mud and cuttings was collected. The first time the SupaVac system was



HALL15227

used, the Baroid crew held a safety meeting to ensure that all rig personnel understood how the units and the overall operation would work. All cleanup operations were preceded by a “toolbox talk” between Baroid supervisors and rig personnel to help ensure each job was carried out efficiently.

ECONOMIC VALUE CREATED – Only five days are now required for each mud pit cleanup job, reducing downtime by approximately 65%. Fewer personnel are needed to do the work, and the tanks are thoroughly cleaned. Before the SupaVac SV400 cuttings transfer system was implemented, the operator paid for up to nine days of additional downtime. The estimated savings for each cleanup job are of US\$ 6.3 MM.