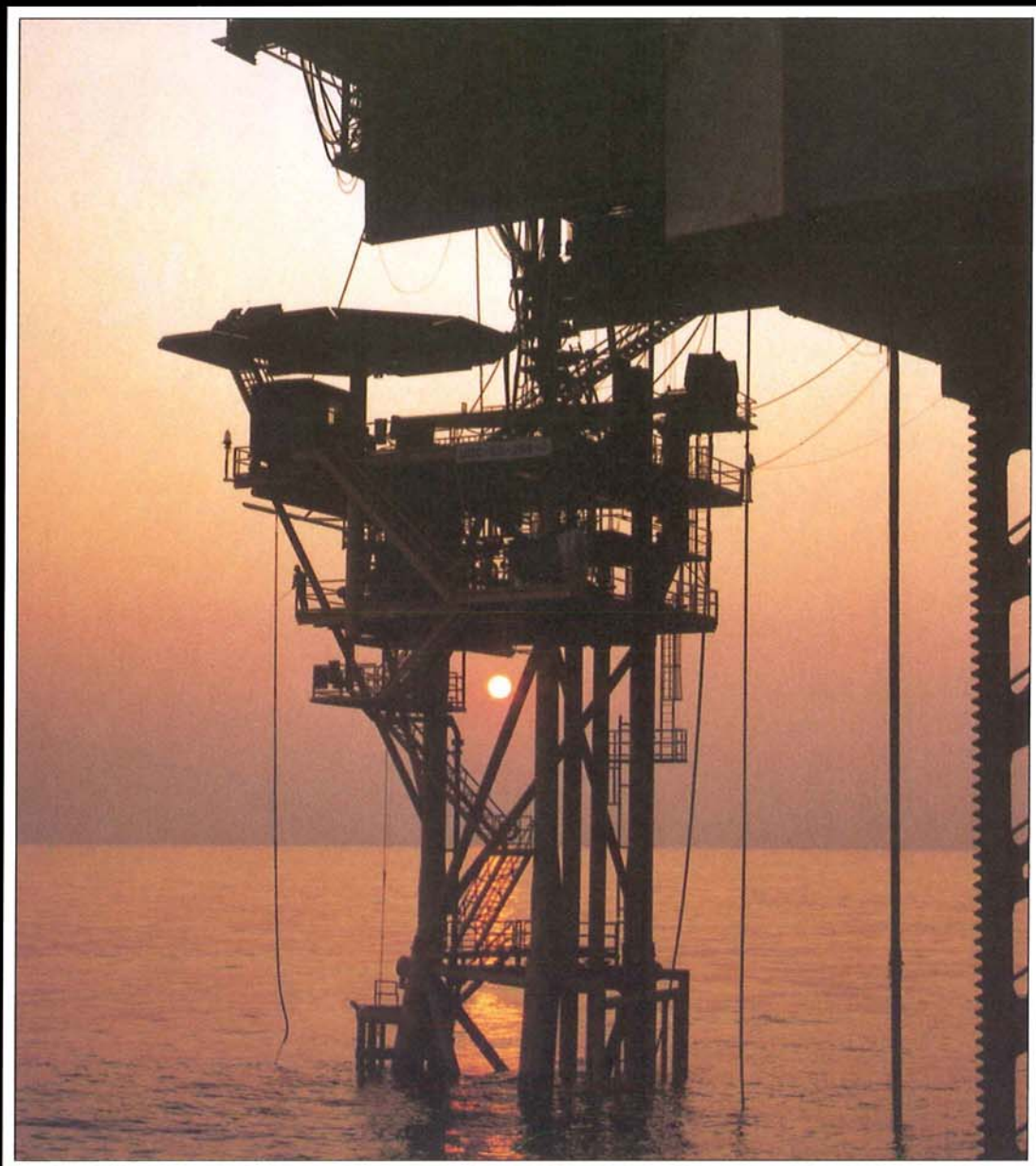


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Pyramid shaker screens help reduce oil mud losses

Dietmar Neidhardt Oiltools International (Cayman) Ltd. Dubai U.A.E.

The use of corrugated pyramid screens on a dryer in second stage mud and cuttings cleaning helped recover a large volume of oil-based drilling mud to save more than \$60,000 in mud costs.

Amoco Sharjah Oil Co. has conducted an extensive drilling program in the Sheikdom of Sharjah since early 1994. In a 67-day period of drilling, the company recovered 1,255 bbl of mud, saving \$62,750 in mud costs. The net savings for the period totaled \$35,815, about \$535/day. No dollar values were placed on environmental benefits.

A key to these savings was a High G Dryer from Derrick Equipment Co., equipped with corrugated pyramid screens. Oiltools International Ltd. supplied the solids-control services for Nabors Rig No. 128, including three Derrick Flo-Line 48 Plus Cleaners, one Derrick High G Dryer, and two S2-1 fully hydraulic centrifuges, all serviced by an engineer (Figs. 1 and 2). The centrifuges can operate either in solids removal or in barite recovery.

Because of previous experience and thorough knowledge of geological sequences, Amoco Sharjah typically completes a 12,000-ft well in the area in about 4 weeks. The wells are usually drilled

MUD CLEANING SETUP

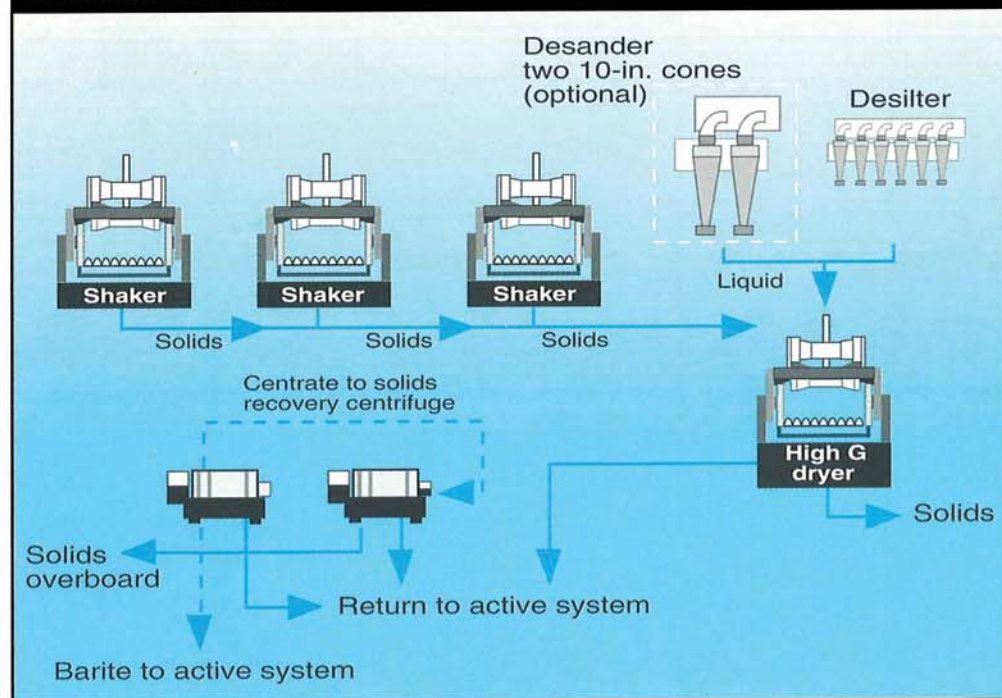


Fig. 1

with oil-based mud, as was the 16-in. hole section on this well.

Dryer

Routine analysis of equipment parameters, such as throughput rates and separation factors, showed that a substantial amount of mud was discharged with cuttings into the waste pit. To try to eliminate this mud loss, Amoco Sharjah put into ser-

vice the recently developed High G Dryer. The dryer has an elongated screen bed and high-G linear-motion separation which are suited to recover residual oil on cuttings at a second separation stage between cuttings discharge and entry into the waste pit.

Amoco Sharjah approved a 3-week trial of the High G Dryer. The unit characteristics include 0.19-in. stroke with two 1,775-rpm motors

(60 hz power) producing an 8G acceleration force. It can be fitted with four 48-in. x 30-in. screen panels.

Special skids were built and explosion-proof augers were installed under the shaker discharge assembly to adapt the dryer to the rig. This work was completed during a 4-day rig move, so the dryer was available at spudding.