

## Offshore West Africa Project

Offshore West Africa- Block 14

**LOCATION**Offshore West Africa-  
Block 14**TYPE**Open Drain  
Caisson- Skim Pile**SIZE**100,000 BWPD  
12' x 120'**ENVIRONMENT**Offshore Compliant  
Piled Tower - CPT**YEAR AWARDED**

2006

**PROJECT VALUE**

\$1MM

**SCOPE**

Skim Pile Package

**STATUS**

Delivery - 2007



*Skim pile vessel in fabrication for Offshore West Africa project*

**PROJECT DESCRIPTION**

The platform in Offshore West Africa, in Angola's deep water Block 14, is expected to come onstream in 2009 and reach peak production of 100,000 bpd of crude by 2011.

With the focus squarely on environmental compliance for this operating platform, the customer chose NATCO Skim Pile technology as the best answer for offshore storm water clean-up and containment.

The Skim Pile was sized for 100,000 BWPD and includes a large vertical vessel, as well as valve skids and pretreatment equipment including filtration and separation. The efficient design minimizes weight and footprint for the restrictive offshore environment.



**Alleviate environmental concerns of offshore storm water run-off with guaranteed NATCO Skim Pile technology.**



*Large 12' x 120' vertical vessel for storm water run off*

## SCOPE OF SUPPLY

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The Skim Pile Package was sized for 100,000 BWPD with a retention time of 20 minutes.

NATCO provides turnkey equipment supply for skim pile caissons, including process design, valve skids and pre-treatment equipment including separation/filtration, detailed engineering, and equipment fabrication.

The Equipment Package includes following equipment:

- One (1) x 100% Skim Pile vertical vessel, 12' od x 120 s/s
- Two (2) x 100% Diaphragm Pumps c/w Inlet Air Filter and air outlet silencer

The project was managed by NATCO Houston execution centers as a turn-key project. Equipment and skid fabrication occurred in the NATCO New Iberia, LA fabrication facility.

## MILESTONES

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- Project awarded- September 2006
- Equipment delivered- November 2007
- Start-up- TBA

## ACHIEVEMENTS

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- Project was completed and equipment delivered to customer on-time and on-budget
- Customer satisfaction and established relationships have led to additional opportunities for Skim Piles with the customer for other platforms.

## TECHNOLOGY OVERVIEW

The Skim Pile is the final stage of the open drain and/or produced water treatment system and is guaranteed to remove all oil globules larger than 50 micros. A Skim Pile should be your preferred caisson for applications where strict adherence to environmental regulations is a concern. The technology is designed to effectively handle offshore storm water run-off.

The separation process in the Skim Pile typically occurs beneath the ocean surface, and the separated water is discharged to the ocean from the bottom of the Skim Pile. Oil/water separation and sand cleaning occurs as intermittent rain and washdown water flows through a series of closely spaced baffle plates. The tight spacing of the baffle plates create quiescent zones which reduce the distance a given oil droplet must rise to be separated from the main flow. Once in the quiescent zone there is sufficient time for coalescence of the oil particles. The ever-growing droplets then migrate up the underside of the baffle into the oil riser. The risers prevent the oil droplet from being swept back into the turbulent flow stream and remixing with the incoming water.

## CONTACT US

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