

OTC 17939

Development of the Kwanda Base Deepwater Logistics Shorebase

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This paper was prepared for presentation at the 2006 Offshore Technology Conference held in Houston, Texas, U.S.A., 1-4 May 2006.

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Abstract

Coincident with the deepwater development of Angola Block 15, Esso Exploration Angola (Block 15), Ltd. (Esso) has contributed significantly to the development and support of Angolan infrastructure. One such project, in addition to others, was the development and construction of the Kwanda Shorebase, which was approved in 2001.

This paper details the challenges of constructing the shorebase and highlights the best practices employed in an area ravaged by 27 years of civil war.

The Kwanda Shorebase Project was challenged with providing the entire spectrum of technical, logistical, and engineering services required for support of deepwater offshore operations while establishing a world-class shorebase. Included in the design was Africa's only covered vessel quay equipped with an overhead gantry crane. This design facilitates vessel loading and unloading in all weather conditions while significantly reducing vessel turnaround time. In addition, dredging of the channel from the Congo River to Kwanda Base was completed to provide unimpeded access by deepwater marine vessels. Other upgrades implemented include state-of-art communications, staff accommodations, offices, and a warehouse.

A complete heliport renovation is currently underway which, upon its completion in the second quarter of 2006, will provide paved parking for eight helicopters, taxiways, a 500 m rejected take-off landing strip, a control tower, a helicopter maintenance hangar, workshops, a passenger terminal, and living accommodations for twelve pilots and engineers.

Esso staffing at Kwanda Base has grown considerably, with over 60% being Angolan nationals. Development of a strong safety partnership and culture has resulted in Esso Operations having achieved zero Lost Time Incidents (LTIs) in over 1,461 days worked.

The Deepwater Shorebase Development Project continues to evolve as Block 15 development and operations proceed at

an unprecedented pace. Other projects underway both onshore and offshore will further increase the need for additional infrastructure development in the region.

Kwanda Base History

Kwanda Base originally serviced shallow-water and some onshore production facilities of other operators in northern Angola. However, Esso recognized that the strategic location of the base, to the east of Block 15 and near the town of Soyo, Angola, made it well positioned to service the needs of Esso's deepwater offshore field developments.

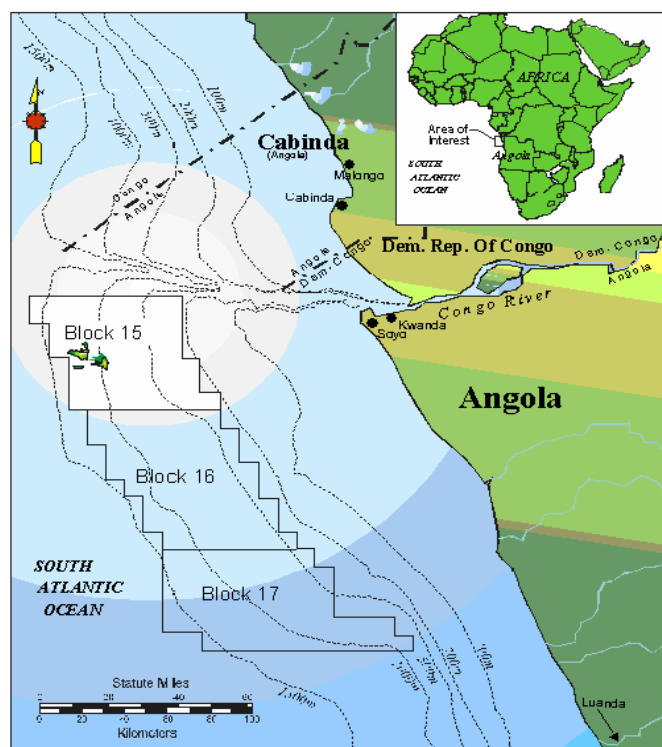


Figure 1. Angola Block 15 Region

During the later years of Angola's revolution, rebel forces overran Kwanda Base, forcing the evacuation of all oil company employees, and the base was shut down from 1993 until 1995. Its infrastructure was stripped of all facilities and equipment, and all buildings were completely gutted. The base was demined before oil company personnel returned to the base in 1996 and began rebuilding the base infrastructure. Though offshore operations were virtually untouched during the conflict, onshore support operations had been relocated to