

Client
Puma Energy



Location
Luanda, Angola



Period
June 2015 – January 2017

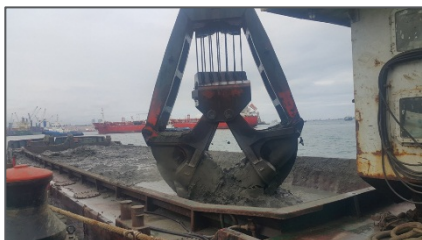
Luanda Fishing Port – Dredging of 50 000 and 15 000 DWT Quay Walls

Brief summary:

Puma Energy is currently constructing an onshore tank farm and quay walls in the Bay of Luanda, Angola. PMI was appointed as primary project managers to supervise capital dredging works for a new port quay wall construction. The two quays are designed to berth vessels of 50 000 DWT and 15 000 DWT respectively.

PMI Scope of Works:

- Onsite project management and quality control, records (Owners Engineer)



Project Background:

Puma's CBM facility and some of the onshore tankfarms is currently operational (two construction phases left). China Petroleum Pipeline Bureau (CPP), acts as the lead EPC Contractor for the project. CPP's main subcontractor for the quay wall construction and dredging works is

CHEC (China Harbour Engineering Company). The quay walls consist of a piled tubular and sheetpile combi-wall structure. The two quay walls have a 240m and 200m berthing line.



The dredging scope of work consisted of the following:

- Dredge the 15,000DWT berth pocket to a design dredge depth of -10.5m CD
- Dredging the 50,000 DWT berth pocket to a design dredge depth of -15m CD
- Dredge the turning circle, access channel and all navigable waterways to -15m CD
- Dredge CBM pipeline trench to -17m CD
- Total dredging volume = 730,000m³



PMI Responsibilities during dredging works:

PMI initially performed a detailed geotechnical investigation throughout the proposed dredging site. This allowed for optimal equipment to be sourced and mobilised to site. Due to the local geotechnical conditions and required tolerances in some locations, three dredgers were mobilised to site, namely a cutter suction dredger, a Trailer Suction Hopper Dredger, as well as a grab dredger, utilising independent hopper barges. With the use of these three dredgers, the dredging campaign was executed accurately and efficiently.



The dredging works commenced during mid-2015, after dredging permits had been issued and a suitable spoil had been located. PMI managed and monitored the disposal site. Regular bathymetric surveys were conducted to monitor dredging progress.

