

TITLE: - CALM BUOY DESIGN AND CONSTRUCTION EXPERIENCE AT KMSE

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ABSTRACT

Back in Q4 2012, MTCE was awarded with EPCIC and OIM contract for EWT KMSE and AJK project. A CALM Buoy mooring system was envisaged for the station keeping of the EWT vessel. The goal of this presentation is to share MTCE experience in engineering and construction of CALM Buoy at KMSE.

The search for a suitable CALM Buoy to be deployed was started by MTCE even before contract awarded. The MONOBUOY Turntable Buoy located in Freemantle Australia was identified and the conquest in getting the buoy back to Malaysia was initiated. Substantial escalation in commercial discussion has led MTCE to find an alternative buoy. A CALM Buoy located in Sibuluan, Sarawak was identified to conform to the functional requirements, but with several modifications required.

In order to enable 6 Nos of mooring chains to be secured via Chain Hawse located along the skirt of the buoy body, a new buoy body was required to be constructed. Three grades of product swivel were further modified to enable pigging activity to be conducted. A specification break was also introduced upstream of the swivel head in accordance to API RP 14C. This presentation will share the experience gained by MTCE during the engineering and construction of the swivel, buoy body and turntable for the CALM Buoy.