

TITLE: - SOFT MOORING AT KMSE AND SPREAD MOORING SYSTEM AT AJK

Mohammad Fareez
MTC Engineering Sdn Bhd

ABSTRACT

Mooring systems are widely used in the offshore industry to limit the horizontal excursions of a floating structure from its desired position in order for the structure to fulfill the required tasks. A mooring system is made up of a mooring line, anchor and connectors, and is used for station keeping of a ship or any floating structure at any water depth. A mooring line connects an anchor on the seafloor to the floating structure. The station keeping system for the floating structure can be either a single point mooring or a spread mooring system. The purpose of this presentation is to describe the presenter's recent experience in the analysis, design, and installation of mooring systems for new oilfields Kayu Manis South East (KMSE) and Anjung Kecil (AJK), which are located in Block SK315 approximately 200 km North-West offshore Bintulu. Both fields used the same Floating Storage Unit (FSU) vessel but with different mooring system concepts; single point mooring utilizing a CALM buoy was used for KMSE while spread mooring was applied at AJK. The presentation describes the respective mooring systems, including their design data, functional requirements, design criteria, and the methodology and results of the mooring analysis for both fields. The fabrication and site installation for the mooring system components are also discussed.