Talk on 'Overview of Offshore Drilling'

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INTRODUCTION

In conjunction with the 17th Annual General Meeting (AGM) of the Oil, Gas and Mining Technical Division (OGMTD), a talk on an 'Overview Of Offshore Drilling' was held at IEM on 17 November 2007 at 9.30 a.m. The speaker, Mr. Chandrasekhar Kirthi Singam, is a Drilling Engineer with Schlumberger Oilfield Services, a leading oilfield services contractor. A crowd of 55 enthusiastic engineers attended this interesting talk.

Photo 1: Mr. Chandrasekhar delivering his talk

OVERVIEW

Chandrasekhar started his talk by mentioning that the main challenges in offshore well drilling are drilling safer, faster, deeper and cheaper. He delved into the purposes of directional drilling, which include:

- Drilling multi reservoirs from one platform
- Relief well drilling
- Drilling an inaccessible location
- Onshore to offshore drilling
- Sidetracking

He briefly introduced the concept of reservoirs and wells before proceeding to show several types of directional well profiles such as J-type, S-type and Horizontal.

Typical drilling tools known as bottom hole assembly (BHA) were listed and each tool's function was also explained. Among the BHA is a drill bit which is used to gouge the formation. There are several types of drill bits i.e. milled tooth, insert, PDC and natural diamond types. Each bit type is designed for either soft or hard formations and utilise actions of either shearing or compression or a combination of both.

Several other components of the BHA were also discussed i.e. steerable motor, Measurement While Drilling (MWD) and Logging While Drilling (LWD). These tools are critical in establishing an accurate direction and inclination while drilling. The MWD and LWD tools serve the added purpose of relaying important data to the clients such as pressure, density and porosity.

Photo 2: Engr. Muhamad Apandi presenting a momento to the speaker

The talk concluded with a Q&A session which touched on the technical aspects of the tools. The incoming Chairman of the OGMTD, Engr. Muhamad Apandi, presented a token of appreciation to Chandrasekhar before adjourning the crowd for a short break. After the break, the crowd was invited back into the Conference Hall for the commencement of the AGM. ■