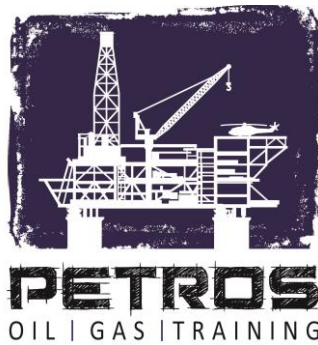


Certificate No : 2022- OFS-063-05-TR

Date : July 20th , 2022



CERTIFICATE OF ACCOMPLISHMENT

This is to certify that

MARTHINUS TONNY PANGEMANAN

ID NUMBER : OFS-063-05

has completed

**OFFSHORE STRUCTURE DESIGN
TRANSPORTATION ANALYSIS**

Held by **PETROS Oil Gas Training** – Jakarta,
June 25th & 28th , 2022, covering the subjects as listed on the back page



Certificate Validation

A handwritten signature in black ink, appearing to read "Heru Prasadja".

Heru Prasadja, ST

Director

OFFSHORE STRUCTURE DESIGN - TRANSPORTATION ANALYSIS

SUBJECTS

- Introduction
- Objective Of The Analysis
- Design Premises
 - Project Specification & Design Criteria
 - Codes and Standards
 - API RP2A-WSD. 21st Edition,
 - AISC13th Edition/ASD,
- Weight Provisions
- Weight Contingencies
- Loading
 - Gravity Load
 - Barge Motion
 - Roll, Pitch & Heave Coefficient
 - Deck Position On the Barge
 - Force Inertia due to Roll & Pitch
 - Forces Due To Roll, Pitch and Heave Motions
 - Wind Load
- Loading Combinations
 - Static Case
 - Dynamic Cases :
 - Roll + Heave
 - Pitch + Heave
 - 80% roll + 60% Pitch + 100% Heave
 - 60% roll + 80% Pitch + 100% Heave
- Transportation Analysis computer modeling
 - Deck Position on the Transportation Barge Assumption
 - Structural Model
 - Boundary Conditions
 - Sacs Run Stream
- Transportation Analysis Report Preparation

FINAL PROJECT : TRANSPORTATION ANALYSIS OF 103 TONS DIESEL STORAGE PLATFORM