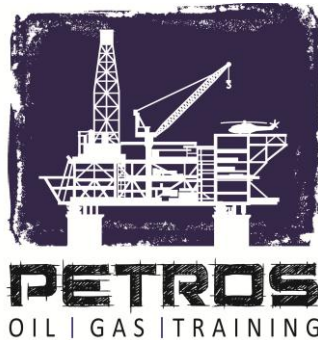


Certificate No : PTR-OFS-TR-WSC-09  
Date : December 20<sup>th</sup> , 2025



# **CERTIFICATE OF ACCOMPLISHMENT**

This certificate is granted to

**MUHAMMAD IFTIKAR FAJRI**  
ID NUMBER : OFS-WSC-09

For successfully completing  
& finished the Final Project of our Training

## **SACS TRAINING - TRANSPORTATION ANALYSIS**

Held at **Wasco Engineering Indonesia** – Batam, Indonesia,  
29 & 30 November 2025, 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

# SACS TRAINING - 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
- Transportation Analysis computer modeling
  - Deck Position on the Transportation Barge Assumption
  - Structural Model
  - Boundary Conditions
  - Sacs Run Stream
- Land Transportation Analysis for FPSO Module
- Sea Transportation Analysis for FPSO Module
- Transportation Analysis Report Preparation

**FINAL PROJECT : TRANSPORTATION ANALYSIS OF 103 TONS DECK PLATFORM**