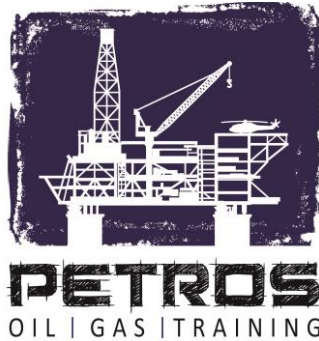


Certificate No : 2024-PTR-FOPD-INP-025  
Date : September 5<sup>th</sup> , 2024



# CERTIFICATE OF ACCOMPLISHMENT

This certificate granted to

**DANU AGUS SUTANTO**

**ID NUMBER : FOPD-INP-025**

For successfully completing 4 days of lesson  
& finished the Final Project of our Course

**FIXED OFFSHORE PLATFORM DESIGN  
INPLACE ANALYSIS**

Held by **Petros Oil Gas Training** on July 23<sup>rd</sup> , August 1<sup>st</sup> , 9<sup>th</sup> & 15<sup>th</sup> , 2024  
covering the subjects as listed on the back page



Certificate Validation

A handwritten signature in black ink, appearing to read "Heru Prasadja", written in a cursive style.

**Heru Prasadja, ST**  
Director

# FIXED OFFSHORE PLATFORM DESIGN - INPLACE ANALYSIS

## INPLACE ANALYSIS THEORY

### INPLACE ANALYSIS COMPUTER MODELING

- Define Splash Zone, Minimum & Maximum Water Depth, Air Gap
- Define Jacket & Deck Dimension & Leveling
- Jacket & Deck Frame modelling
  - *Jacket Leg & Pile*
  - *Conductor*
  - *Vertical & Horizontal Bracing*
  - *Main Deck & Cellar Deck Frame*
- Define Steel Section
- Corrosion Allowance
- Define Member Group
- Define Member Offset
- Define Effective Length
- Define Span Member
- Define Splash Zone, Minimum & Maximum Water Depth
- Define Drag & Mass Coefficient (Cd & Cm)
- Define Marine Growth
- Define Of Loadings on Platform (Structure, Mechanical, Piping, EI, WOR, Crane, etc)
- Define Of Seastate Loadings (Current, Wind, Wave)
- Provisions, Contingencies Load Factor
- Define Operating & Extreme Loading Combinations (Minimum & Maximum Water Depth)
- Increased Allowable Stress
- Unity Check Part
- Setting Inplace Analysis Option

### SOIL DATA

- Preparation Of Soil Input Data (P-Y, T-Z, Q-Z)

### CHECK RESULTS AS PER API RP 2A WSD 21<sup>ST</sup> & AISC 360-16

- API/AISC Member Stress Ratios
- API/AISC Joint Punching Shear Stress Ratios
- API/AISC Joint Minimum Required Strength Ratios
- Deflections Checks
- Piles Axial Capacity And Unity Check

### ANALYSIS REPORT PREPARATION

**FINAL EXAMS : Inplace Analysis For Fixed Offshore Platform (4 Leg, 79 M Water Depth)**