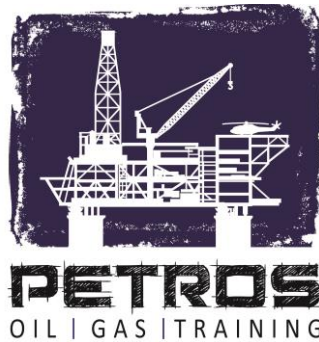


Certificate No : 2022- OFS-062-02-LO

Date : July 20<sup>th</sup> , 2022



# CERTIFICATE OF ACCOMPLISHMENT

This is to certify that

**MUHAMMAD IQBAL ALVANI**

ID NUMBER : OFS-062-02

has completed

**OFFSHORE STRUCTURE DESIGN  
LOAD OUT ANALYSIS**

Held by **PETROS Oil Gas Training** – Jakarta,  
June 4<sup>th</sup> , 2022, covering the subjects as listed on the back page



Certificate Validation

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

**Heru Prasaaja, ST**  
Director

# OFFSHORE STRUCTURE DESIGN - LOADOUT ANALYSIS

## BASIC THEORY

### METHOD OF ANALYSIS

A normal set of conditions:

- All support active.
- A vertical displacement of  $\pm 30$  mm is imposed on each of the 4 supports alternatively.

An extreme set of conditions:

- Each support is successively released:
- A maximum vertical displacement of  $\pm 60$  mm is imposed on each of support alternatively

### STRUCTURAL ANALYSIS

Basic Load Case

- Elementary Load Cases
- Gravity Load
- Variation Of CoG Location
- Displacement Of Support
- Wind Load
- Friction Load

Load Combination

- Full skidway support + Shifting + Wind
- Loss support + Shifting
- Each Support preset 30 mm upward + Shifting+Wind
- Each Support preset 30 mm downward + Shifting + Wind
- Each Support preset 60 mm upward + Shifting+Wind
- Each Support preset 60 mm downward + Shifting + Wind

### LOADOUT ANALYSIS COMPUTER MODELING

- Model and Input Data
- Create Loadout Input File
- Running The Analysis

### ANALYSIS OF RESULTS

- Total Deck Weight, Centre Of Gravity, Support Reactions , Deflection
- API/AISC Member Stress Ratios
- API/AISC Joint Punching Shear Stress Ratios
- API/AISC Joint Minimum Required Strength Ratios

### REPORT PREPARATION

**FINAL PROJECT : LOADOUT ANALYSIS OF 103 TONS DIESEL STORAGE PLATFORM**