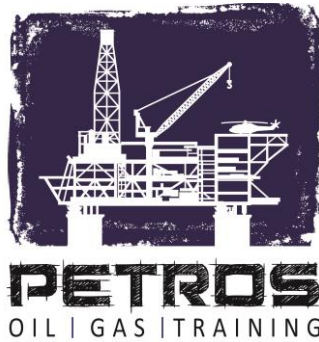


Certificate No : 2023-PTR-FOPD-SEIS-003-01
Date : July 17th , 2023



CERTIFICATE OF ACCOMPLISHMENT

This is to certify that

MOH. AZZAM NASHRULLAH UBAID
ID NUMBER : FOPD-SEIS-03-01

has completed our training

**FIXED OFFSHORE PLATFORM DESIGN
SEISMIC ANALYSIS**

Held by **PETROS Oil Gas Training** – Jakarta,
July 10th , 2023, 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

FIXED OFFSHORE PLATFORM DESIGN – SEISMIC ANALYSIS

SUBJECTS

ANALYSIS PROCEDURE

- Dead Load (Static) Analysis.
- Equivalent Linear Pile Stiffness Determination.
- Dynamic Analysis (Free Vibration Analysis)
- Earthquake Response Analysis.
- Combination of Static and Dynamic Analysis Result.
- Member and Joint Check.

SEISMIC ANALYSIS COMPUTER MODELLING

STATIC ANALYSIS

- Structural Model For Static Analysis
- Foundation Model For Earthquake Analysis

FREE VIBRATION ANALYSIS

DYNAMIC SPECTRAL EARTHQUAKE ANALYSIS

COMBINATION OF STATIC AND DYNAMIC ANALYSIS RESULT

SUMMARY OF CONCLUSION

- Masses Summary
- Natural Frequencies And Modes
- Member Stress Checking
- API/AISC Joint Punching Shear Stress Ratios
- API/AISC Joint Minimum Required Strength Ratios
- Piles Safety Factor

SEISMIC ANALYSIS REPORT