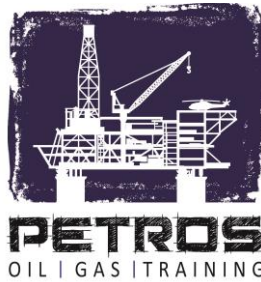


Certificate No : 2021-PTR-EC-LE-015

Date : August 2nd , 2021



CERTIFICATE OF ACCOMPLISHMENT

This certificate granted to

ZAINUDDIN AFFRIEYASA

ID NUMBER : PTR-EC-LE-015

For its success for completing the training

LIFTING/RIGGING ENGINEER

And meet all requirements with score:

83.40

of 100 points

Trainer :

TAUFIQURRAHMAN, ST

Certified Advanced Rigging Engineer - CA 90722 Wood Group

Held by **Petros Oil Gas Training** – Jakarta

July 27th to 29th , 2021, covering the subjects as listed on the back page



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

Heru Prasadja, ST

Director

Valid Through : August, 1st , 2023

LIFTING/RIGGING ENGINEER TRAINING

BASIC RIGGING

- Lifting/Rigging Principles
- Type of Slings
- Weight Calculation, SWL, Angle Factor & Sling Factor
- Lifting Gear/Accessories' (Shackle, Eyebolt, Clamp, Chain Block)
- Ascertain of general lifting procedure and related government regulation for lifting

SAFETY LIFTING

- Lifting Hazard
- Personal Safety Equipment
- Commons Systemic Lapses Involving Lifting Activities
- Hand Signal

LIFTING PROCEDURE

- Lifting Categories (light, heavy, critical)
- Lifting Team
- Risk Assessment & How to Control the Hazard
- Pre Lift Safety Check
- Statutory Inspection of Lifting Equipment
- Communication
- Rigging Plan Preparation Check List

ADVANCE RIGGING

- Pre-use Inspection of Lifting Equipment
- Recommended Rigging, Slings Methods & Calculation
- Sling Factor, Angle Factor, Estimation Weight, Determine Weight & COG
- Roles & Responsibility of Lifting Teams
- Lifting Plan
- Multi Crane Lift
- Purchases System (pulley)
- Span Rope & Flying Fox

STUDY CASE : Lifting Operational Procedure for 61 Ton Structural Module

- Set Up Crane Configuration
- Define Lifted Weight & CoG
- Select A Right Crane & Lifting Gear Selection
- Ground Bearing Pressure Verification

FINAL EXAMINATION : Develop Lifting Operational Procedure for 45.3 T Modular Structure