Certificate No : 2026-PTR-EC-LE-219
Date : September 24th , 2026

PETROS
OIL | GAS | TRAINING

CERTIFICATE OF ACCOMPLISHMENT

This certificate is granted to

EFRAT IMANUEL LINTING

ID NUMBER : PTR-EC-LE-219

For successfully completing the training

LIFTING/RIGGING ENGINEER

Has completed all task and passed the Final Exams with a score:

83.40

of 100 points

This training is held by **Petros Oil Gas Training**
covering the subjects as listed on the back page

Valid Through :
September 24th , 2028

Heru Prasadja, ST
Director

www.oilgas-training.com

LIFTING/RIGGING ENGINEER TRAINING

Subject

1. Law & Requlation
2. Lifting Team Member
3. Lifting Category & Approval Hierarchy
4. Site Survey, Load & Hazard Identification
5. Lifting Equipment Category
    - *Lifted Equipment*
    - *Lifting Appliance*
    - *Lifting Accessory*
6. Typical Rigging Arrangement
    - *Define lifting point location*
    - *Type of hitch (vertical hitch, choker hitch, basket hitch, and bridle hitch)*
    - *Angle factor*
    - *Reeve factor*
    - *Multi stage rigging arrangement*
    - *Tandem Lift*
    - *Tailing Lift*
7. Lifting Gear, Inspection & Rejection Criteria
    - *MBL, WLL & SWL*
    - *Wire Rope Sling*
    - *Chain*
    - *Webbing Sling*
    - *Round Webbing Sling*
    - *Shackle*
    - *Other lifting accessories*
8. Center of Gravity
    - *The importance of COG data*
    - *The Impact of COG Inaccuracy*
    - *COG data resources*
9. Load Factor (DNVGL-ST-N001)
    - *Wc*
    - *DAF*
    - *SKL*
    - *CoG*
    - *Consequence Factor*
    - *Yaw*
    - *Tilt*
10. Dynamic Sling Load (DSL)
11. Lifting Calculation using Trigonometry Method
    - *Basic Load Distribution*
    - *Load Path*
    - *Load sharing at 2 lifting point*
    - *Load sharing 4 Lifting point*
    - *Multi level rigging arrangement*
12. Dynamic Hook Load (DHL)
13. Crane
    - *Type of Crane*
    - *Crane Components*
    - *Reading Crane Manufacture Data*
    - *Crane Selection*
    - *Crane Setting*
    - *Working Radius, Loading Chart & SWL*
    - *Crane Utilzation & SF*
    - *Ground Bearing Pressure*
    - *Crane Inspection*
14. Safety Lifting
    - Lifting Hazard
    - Risk Assessment & How to Control the Hazard
    - Job Safety Analysis
    - Tool Box Talk
    - Communication

FINAL PROJECT :

Lifting Plan for 23 ton E-House using KATO NK500 which consists :

- *Detail enginering calculation for of multi level rigging arrangement*
- *Prepare Lifting Plan Drawing*
- *Develop Lifting Method*
- *Develop Lifting Operational Procedure*
- *Develop Job Safety Analysis (JSA)*