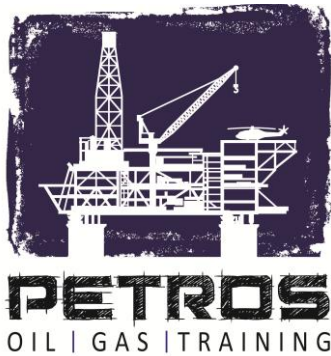


Certificate No : 2025-PTR-EC-IND-003

Date : March 18th , 2025



CERTIFICATE OF ACCOMPLISHMENT

This is to certify that

ZARWAN ZUHDI

ID NUMBER : PTR-EC-IND-003

has completed 24 hours & finished the Final Project of our e-Course

INSTRUMENTATION DESIGN FOR OIL GAS PLANT

TRAINER :

Muhammad Riandi, S.T - Senior Instrument Engineer

Held by **PETROS Oil Gas Training** covering the subjects as listed on the back page



A handwritten signature in black ink, appearing to be "Heru Prasadja".

Heru Prasadja, ST

Director

INSTRUMENTATION DESIGN FOR OIL GAS PLANT

INTRODUCTION

- Introduction to Oil & Gas projects
- Scope of Instrumentation Engineer in Oil & Gas Projects
- Understanding P&ID and PFD

BASIC INSTRUMENTATION

- Instrumentation Basics
- Concept of Input/Output and PCS vs SIS System
- Instrument Wiring

ENGINEERING DOCUMENTS PREPARATION

- Prepare Instrument Index
- Prepare I/O List
- Prepare Data Sheets
- Review the Specification Document
- Check Vendor Catalog
- Check Cable Schedule

ENGINEERING DRAWING REVIEW

- Instrument Layout
- Instrument Cable Route
- Instrument Cable Block Diagram
- Junction Box Wiring Diagram
- Instrument Loop Diagrams
- Hook-Up Drawing

FINAL PROJECT