

Oil & Gas Field Processing Troubleshooting

5 days
Overview

TRUBLE-EN-P

LEVEL

Knowledge

PURPOSE

To contribute to troubleshooting operations by identifying and tackling process deviations and abnormal conditions using a structured, step-by-step approach.

LEARNING OBJECTIVES

Upon completion of the course, participants will be able to:
explain operation normal conditions, list common issues on main O&G processes and major equipment,
identify roots causes to process deviations and abnormal conditions by using a structured, step-by-step approach,
find an adapted solution to the identified problem.

WAYS AND MEANS

Training delivery with industry specialist lecturers.
Methodology illustrated by multiple industrial case studies.
Use of a dynamic simulator for process control tuning.
Specific case study related to the actual plant operated by the participants.

LEARNING ASSESSMENT

Case studies.

PREREQUISITES

A 6 months experience in field operations.

Agenda

METHODOLOGY

Troubleshooting flowchart.
Recognize a trouble when occurring. Problem definition using ISHIGAWA fishbone chart.
Methodological approach to identify causes and remedial options.

1 d

CASE STUDIES

Operating parameters instability.
Compressor failure.
Glycol and hydrate inhibition .
Non-compliance with product specifications.
Pipeline network analysis.
Flowline erosion.

1.5 d

CASE STUDIES ON SIMULATOR

The participants will study the different types of control loops and the consequences of an inappropriate tuning of PID algorithm parameters through dynamic simulation exercises.

0.5 d

SPECIFIC CASE STUDY RELATED TO THE PLANT OPERATED BY THE PARTICIPANTS

2 d

During these two days:

Describe normal production operations.

Review production units current operating conditions.

List recurrent abnormal conditions, operating parameters disturbances phenomena and observed consequences.

Use methods studied on the first day to identify causes and potential corrective actions.