

## **Upstream Downstream Training Plant (UDTP)**

Being the first-of-its-kind in the world, UDTP is the suitable testbed to test and pilot new & innovative technology deployment in safe and real-world simulation of Upstream & Downstream plant scenarios.



# Why UDTP?



## Technology acceleration enabler

Accelerate and support PETRONAS Technology Readiness assessment by testing and piloting new θ innovative technology before full commercial application



## Customisable & Flexibility

Technology deployment customisable according to your schedule without having a shutdown window



## Safe operating conditions

Simulate real-world Upstream & Downstream plant scenarios in a safe environment



### Cost Effective

Real-world technology deployment without undergoing plant shutdown

## What can you do at UDTP?

### 01 Experiential Learning

Equipment familiarisation
Plant turnaround
Plant process & coordination



#### 02 Technology Deployment

Technology readiness assessment Pilot project Vibration study



### 03 Competency Development

Competency based assessment PECAS RESISCO



## **Plant Facilities**

### **Upstream Facilities**

Central Control Room
Well System (Production & Injection)
Well Testing
Separation System
Crude Stabilisation System
Gas Compression System
Gas Dehydration System
Produced Water Treatment System
Pumping System
Pigging System
Flare/Vent System
Drain System

## Upstream Flow Medium & Process Parameters

Nitrogen
Non-volatile mineral oil
Water
Design Basis
Pressure: 7 - 12 barG
Temperature: 15 - 120 degrees Celsius
Process Parameters
Oil flowrate: 1,500 bpd
Water flowrate: 1,500 bpd
Water cut: 50% (max)
Gas flowrate: 0.5 MMscf/d
Gas oil ratio: 333.33 scf/bbl

#### **Downstream Facilities**

Central Control Room
Crude Distillation System
Hydrocarbon Treatment System
Water Treatment System
Boiler System
Furnace System
Cooling Water System
Flare System
Drain System

## Downstream Flow Medium & Process Parameters

Flow Medium
Tri-Ethylene Glycol (TEG)
Nitrogen
Water
Design Basis
Pressure: 7 - 12 barG
Temperature: 15 - 160 degrees Celsius
Process Parameters
Crude Distillation Unit (CDU): 1,500 bpd
Hydro Treating Unit (HTU): 750 bpd
Gas flowrate (CDU): 0.5 MMscf/d
Gas flowrate (HTU): 0.5 MMscf/d

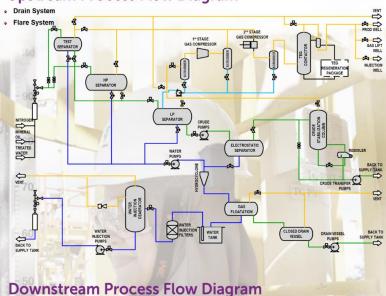
#### **Common Facilities**

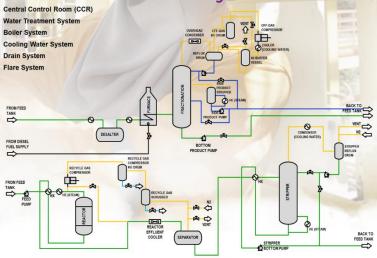
Air System (Instrument and Service Air) Nitrogen System Fire Water System Emergency Power Generation Storage System (Water, Diesel, Base Oil and TEG)

### **HSE Facility**

**Emergency Response Suite** 

### **Upstream Process Flow Diagram**





## **CONTACT US NOW!**



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