



Produced Water Treatment Project – Phase 1

Client: Heritage Energy and Oil Services Limited (HEOSL)

Heritage Energy and Oil Services Limited (HEOSL), Operator of OML 30, on behalf of the joint venture partners, embarked on the Detailed Engineering Design of the Produced Water Treatment and Crude Oil Dehydration Project which covers three (3) of their facilities namely Ughelli Pumping Station (UPS), Afiesere and Eriemu to achieve three key objectives:

- Reduce cost of fluid handling tariff being paid to Forcados Terminal operator (OPEX)
- Enhance crude storage capacity of the UPS, thus enabling OML 30 production target of net oil of 200,000 BPD by 2020.
- Increase crude oil handling capacity of the Trans Forcados Pipeline (TFP)

The project will also enable other secondary benefits, such as reducing corrosion of the TFP. Due to urgency of the constraints, HEOSL decided to proceed with the Phase 1 of the project -Temporary produced water treatment and injection facilities installation with 75,000 BPD capacity.

Temporary facilities are required to allow treating up to 75,000 BPD produced water. The following are equipment and systems to be developed during the DED project with design life of the new facilities to be 30 years.

- Treated Water, Slop Oil and Two (2) Balance Tanks
- Three (3) 25,000 BPD Trains of Produced Water Treatment Systems
- Treated Water Tank
- Slop Oil Tank and Pump
- Treated Water Booster Pumps
- Chemical Injection Facilities.
- Compressed Air System
- Treated Water Filter System
- Water Injection Pumps and Manifold.
- 13.4 km pipeline between UPS and Eriemu
- 6Km Pipeline Eriemu and Afiesere that transfers treated water.
- 1km Pipelines from Afiesere to Afie 19 Water Injection Wells designed for 100,000 BPD Capacity.
- A Pig Receiver at the end of Eriemu to Afiesere Pipeline.
- A pig launcher at the start of Eriemu to Afiesere
- Power Generation System at UPS
- Fuel Gas System (to be confirmed)

Services

Detailed Engineering Design

Location

Delta & Lagos, Nigeria

Safety Record

Zero LTI, Zero MTI

Total Man-Hours

15, 542hrs

Status

Ongoing

