

SCOTT PLATFORM

DESCRIPTION OF INFRASTRUCTURE

The Scott installation comprises two independent bridge linked platforms each supported by steel jackets. The two platforms are the drilling and process platform (DP), and the utilities and quarters platform (UQ).



The DP platform comprises an eight-leg jacket supporting an integrated deck housing process train, gas treatment, flare boom, drilling facilities and derrick. The UQ platform comprises a four-leg jacket supporting an integrated deck housing utilities, living quarters, lifeboats, helideck, water injection, power generation and the exhaust structure.

ENTRY SPECIFICATION

The entry specification for any third party tie back to the Scott Platform for offshore processing would be assessed on an individual basis. The existing facilities process sweet crude oil/gas well stream fluids. There are no facilities for processing contaminants such as mercury or H₂S.

Historically Scott has treated H₂S levels up to 180ppm in the gaseous phase and 31ppm in the liquid phase.

EXIT SPECIFICATION

Crude oil and natural gas liquids are extracted from processing well stream fluids on the Scott facilities and are exported via the Forties Pipelines System (FPS). The export stream meets the FPS entry specifications.

Gas is processed on the Scott facilities to meet the SAGE entry specifications and is exported via the SAGE system to St Fergus where natural gas and natural gas liquids

are separated. The natural gas is sent to the National Transmission System (NTS) and the natural gas liquids are either sent on to the FLAGS system or to the Forties Pipeline system for further processing into specification natural gas liquid products.

PRIMARY SEPARATION PROCESSING FACILITIES

The Scott process systems are designed to process well stream fluids from the Scott reservoirs and export the separated oil and gas to shore.

These primary separation facilities include a single, three-stage, three-phase, separation train, water injection and produced water disposal. Well performance is tested by flowing any of the wells to the test separator which operates in parallel and at the same conditions as the first stage separator.

Telford produced fluids are initially processed in the Telford separator and then flow to the existing downstream Scott process systems. Telford produced fluids can also flow through the Scott test separator via the topsides test manifold. Produced water is treated by a dedicated Telford hydrocyclone skid. Injection water is supplied from the existing platform system.

Produced fluids from the Rochelle field are initially processed in a dedicated Rochelle vertical inlet separator and are separately measured, prior to commingling with Scott and Telford produced fluids in the existing downstream compression and crude stabilisation facilities.

The Rochelle production separator design incorporates provision to retrofit for produced water should there be well productivity following formation water breakthrough.

GAS TREATMENT FACILITIES

The Scott/ gas processing facilities include two parallel 100% centrifugal gas compression trains currently operated in duty-standby mode. There is a single gas dehydration contactor. Gas dehydration is performed using Triethylene Glycol.

Currently there are no contaminant removal facilities.

INDICATIVE SYSTEM CAPACITIES

Entry Specification	Sweet Crude Oil
Exit Specification	Crude oil and natural gas liquids are exported to FPS via the Unity platform. Gas is exported to the SAGE pipeline. The export streams are pre-treated to meet FPS and SAGE entry specifications.
Oil Export	225,000 STB/day
Gas Compression	168 MMscfd
Gas Export	As per Gas Compression less gas lift and fuel gas.
Gas Lift	As per Gas Compression less export gas and fuel gas.
Produced Water Handling	240,000 STB/day. The installed hydrocyclone and degasser capacity is 350,000 STB/day; however, system capacity is limited by operating pressures and degasser capacity.
H ₂ S Removal	Currently no H ₂ S removal capability on Scott platform.
Dehydration	190 MMscfd
Water Injection	400,000 bwpd. Ullage in the system dependent on injection pressure requirements.

ULLAGE	2019	2020	2021	2022	2023
Oil Export	G	G	G	G	G
Gas Compression	G	G	G	G	G
Gas Export	G	G	G	G	G
Produced Water Handling	G	G	G	G	G
Dehydration	G	G	G	G	G
Water Injection	R	R	R	R	R

R	<5% Ullage
A	5% to < 25%
G	> 25%

ADDITIONAL INFORMATION

For additional information please contact:

Carl Fiddimore
Commercial Manager
CNOOC International Europe Limited
Prospect House
97 Oxford Road
Uxbridge
UB8 1LU
United Kingdom

Tel: +44 (0) 1895 237 700

Email: Carl.Fiddimore@intl.cnoocld.com

SUBSEA INFRASTRUCTURE:

Scott subsea overview

