

ALWYN NORTH



Alwyn North consists of two platforms (NAA and NAB) linked by a 73 metre steel bridge. NAA is the drilling and accommodation platform. NAB houses the processing facilities.

On NAA the derrick is set above the wellhead area where there are slots for up to 40 wells. NAB receives untreated oil and gas across the bridge from NAA and Dunbar and processes the oil and gas ready for export by pipeline.

The bridge is the passage for the crew to walk between the two installations and the link between the drilling and well facilities on NAA and the process facilities on NAB. Untreated oil and gas cross the bridge from NAA to be processed ready for export by pipeline. The bridge also carries the links for the systems that are common to both - electrical power, fire and gas control, emergency shut-down system, process control and telecommunications.

ALWYN NORTH – FACTS & FIGURES

Block:	Block 3/4A, 3/9A, 3/10B; UK Sector
Licence Number:	P.090, P.416
Location:	440km north east of Aberdeen
Operator:	TOTAL E&P UK Limited (100%) operator
Field Discovered:	October 1975
Production Start:	Oil / NGLs / Gas: 1987
First Year of Peak Production:	Oil / NGLs : 1989 Gas: 2000
Peak Production:	Oil: 4.36 million tonnes per year NGLs: 0.11 million tonnes per year Gas: 3.8 billion cubic metres per year
Water Depth:	126m
Estimated Recovery Factor:	Oil: 42% Gas: 58%
Original Estimated Recoverable Reserves:	Oil: 309 million standard tonnes NGLs + LPGs: 2.95 million tonnes Gas: 55.2 billion cubic metres
Oil Production*:	10,000 barrels per day / 1,610 cubic metres per day
Produced Water*:	48,700 barrels per day / 7,741 cubic metres per day
Gas Production*:	146 million standard cubic feet per day 4.1 million cubic metres per day
Gas Injection*:	Cancelled – no more gas injection
Water Injection*:	No further water injection, Brent blow down Water injection provided to Dunbar (90,000 bbl/d)
Export Gas (Alwyn Area)*:	565 million standard cubic feet per day 16 million cubic metres per day
Gravity:	40° API (Brent) to 47° API (Triassic)
Sulphur:	0.5%
Oil Production Wells:	10 + 1 subsea wells
Gas Production Wells:	11 + 5 Nuggets wells
Water Injection Wells:	4
Gas Injection Wells:	Cancelled – no more gas injection

ALWYN NORTH – FACTS & FIGURES

NAA (DRILLING AND ACCOMMODATION PLATFORM)

Platform Type:	Steel Jacket 4 Legs Inter-connecting 73-metre bridge to NAB; 31m above the water
Platform Weight:	Topsides: 16,015 tonnes Jacket: 15,900 tonnes Piles: 32 tonnes
Production Deck:	55.7m x 29.9m
Drilling:	40 platform slots; 26 pre-drilled wells
Accommodation:	250 (300 maximum)
Manning:	100 core crew (plus drilling, well servicing, construction as required)
Lifeboats:	7 x 58 man capacity
Liferafts:	19 x 25 man capacity

NAB (TREATMENT AND PRODUCTION FACILITIES PLATFORM)

Platform type:	Steel Jacket 8 legs Inter-connecting 73m bridge to NAA
Platform weight:	Topsides: 19,498 tonnes Jacket: 14,700 tonnes Piles: 24 tonnes
Production Deck:	52.1m x 24m
Lifeboats:	4 x 58 man capacity
Liferafts:	5 x 25 man capacity

ALWYN NORTH – FACTS & FIGURES

TRANSPORT SYSTEM

Oil Export:	12" x 32.5 mile/30cm x 52 km pipeline to Cormorant Alpha platform then via the 36" x 95 mile/90cm x 152km Brent Pipeline System to the Sullom Voe Terminal
Gas Export:	24" x 69 mile/60cm x 111km pipeline to TP1 (Frigg bypass) , then 32" x 226 mile/81cm x 362 km pipeline via the MCP-01 bypass to the St Fergus Gas Terminal

MAJOR CONTRACTORS

NAA/NAB Jacket Design:	John Brown/Sofresid
NAA Topsides Design:	Foster Wheeler Petroleum Development
NAB Topsides Design:	McDermott Engineering
Fabrication of Jacket:	RGC
Fabrication of Wellhead Module	McDermott Engineering
/Drilling Substructure/Piles:	
Pipeline Installation:	Brown & Root
Installation of Jacket/Topsides:	Heerema/SSCV Balder
NAA Offshore Hook-up:	P & W Offshore
NAB Offshore Hook-up:	AOC International/Technip Geoproducor

