Northern Leg Gas Pipeline (NLGP)

Background



The Northern Leg Gas Pipeline (NLGP) system comprises of the following:

- the twenty inch (20") diameter, 80km long trunk pipeline extending from the face of the flange connected to the base of the gas offtake riser on the Magnus Platform to the gas delivery point into the Shell operated FLAGS pipeline (offshore section of the SEGAL System) near the decommissioned Brent A platform which is five (5) metres downstream of the centreline of the Eastern top bar of the 'V2C' NLGP SSIV structure;
- ii. the twenty inch (20") diameter trunk pipeline extending from the point approximately located at UTM co-ordinates 6767655.87N, 429783.26E to the Brent Alpha Platform, including any riser and necessary on-deck equipment on the Brent Alpha Platform owned by the Original Pipeline Owners;
- iii. six-inch diameter, 9.3 km long lateral pipeline connecting the EnQuest operated Thistle
 A platform to the trunk line. This is a lateral pipeline extending from a point one (1)
 metre, in the direction away from the Thistle Platform, from the bell mouth of the
 Thistle Platform's gas offtake "J" tube, to the trunk pipeline described in (i);
- iv. the disconnected lateral pipeline extending from a point one (1) metre, in the direction away from the trunk pipeline described in (i), from the hyperbaric weld at UTM co-

ordinates 6807758.2N, 432754.1E to a point located proximate to where said lateral pipeline was formerly connected to the trunk pipeline described in (i); and

v. 12-inch, 11 km long spur line connecting the Statoil operated Statfjord B platform (located in the Norwegian sector of the North Sea) to the trunk line. This is the lateral pipeline from the Statfjord B Platform to the trunk pipeline described in (i) but only to the extent that such lateral pipeline extends from the point of its intersection with the westernmost boundary of the Statfjord unit area at the UTM co-ordinates 6785992N, 432747E to the trunk pipeline described in (i).

The NLGP transports natural gas in dense phase. Subsequent transportation and processing in the FLAG/SEGAL system can ultimately lead to the delivery of sales quality gas into the UK National Transmission System at St Fergus in the northeast of Scotland, and the delivery of separated natural gas liquids into either the Shell operated SEGAL system or the onshore section of the INEOS operated Forties Pipeline System.

The NLGP is owned collectively by the following field owners: Magnus (44%), Thistle (7%) and Statfjord UK (49%). The Murchison Field Group became an Exempt Sleeping Owner in 2016.

Despite having been in operation since 1982, strict adherence to operating procedures and rigorous maintenance and inspection programmes have ensured the NLGP remains in good physical condition.

| Location | From the Magnus platform to the gas delivery point into the Shell |
|-------------|---|
| | operated FLAGS pipeline |
| Description | 20-inch diameter, 80km long trunk line running from the EnQuest operated Magnus platform to the gas delivery point into the Shell operated FLAGS pipeline (offshore section of the SEGAL System) near the decommissioned Brent A platform. 6-inch diameter, 9.3 km long lateral pipeline connecting the EnQuest operated Thistle A platform to the trunk line. 12-inch, 11 km long spur line connecting the Statoil operated Statfjord B platform (located in the Norwegian sector of the North Sea) to the trunk line. |
| Owners | EnQuest NNS Limited 10.976% (Operator) BP Exploration Operating Co Ltd 32.927% |

Characteristics

| | EnQuest Heather Limited 7.244% Britoil Limited 0.073% |
|------------------|--|
| | • Spirit Energy Resources Limited 48.780% |
| Export Routes | Subsequent transportation and processing in the FLAG/SEGAL |
| | system can ultimately lead to the delivery of sales quality gas into |
| | the UK National Transmission System at St Fergus in the northeast |
| | of Scotland, and the delivery of separated natural gas liquids into |
| | either the Shell operated SEGAL system or the onshore section of |
| | the INEOS operated Forties Pipeline System. |
| Maximum Capacity | 300 MMscfd |

High Level Capacity

NLGP does not operate a capacity booking system. The maximum capacity of the NLGP, whilst dependent on both operating conditions in downstream SEGAL system and the actual entry point utilised, is nominally 300 MMscfd.



To discuss any New Business please contact the NLGP Commercial Advisor/EnQuest Commercial Manager by phone or in writing to:

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Northern Leg Gas Pipeline Infrastructure Specification Information

Entry Specification

Natural gas shall be technically and commercially free from objectionable odours and dust or other solid or liquid waters, waxes, gums, gum forming constituent which might cause injury to or interface with the operation of the lines, meters, regulators or other appliances through which it flows.

Specification.

| Hydrocarbon dew | • Maximum of 103.8 barg at 5.6 degC |
|-------------------|--|
| point pressure | |
| Water content | Maximum of 35 ppm volume |
| Total Sulphur | Maximum of 35 ppm volume |
| Hydrogen Sulphide | Maximum of 3.3 ppm volume |
| Carbon Disulphide | • Nil |
| Mercaptans | • Nil |
| Carbon Dioxide | Maximum of 1.15% mole |
| Oxygen | Maximum of 10 ppm volume |
| Export Pressure | Design maximum of 149 barg |
| | Normal operating entry pressure 133-136 barg |

• Document (including capacities) last updated May 2018