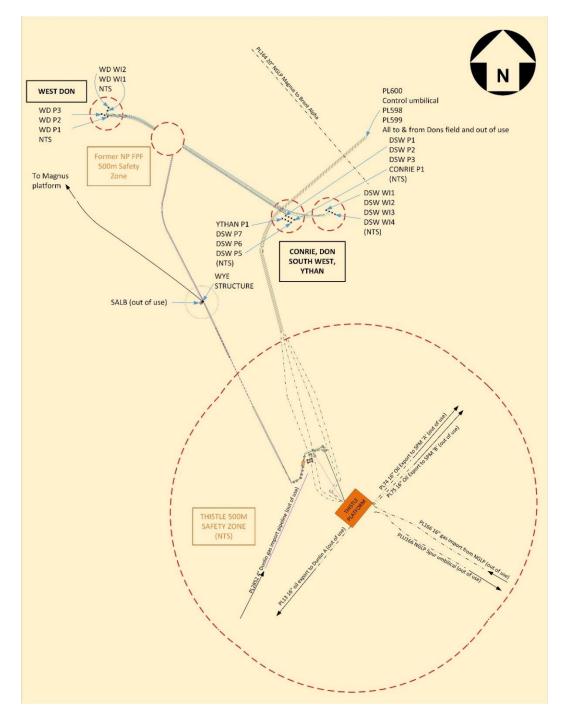
# Decommissioning Programmes for Conrie, Don South-West, West Don and Ythan Fields



FINAL VERSION: 10 June 2021



# **DOCUMENT CONTROL**

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ABBREVIATION	EXPLANATION
~	Approximately
AHV	Anchor Handling Vessel
CNR	CNR International (UK) Limited
CSV	Construction Support Vessel
DBB	Double Block and Bleed (valve arrangement with vent)
DFGI	Dunlin Fuel gas Import (Skid); outside of scope
DP	Decommissioning Programme(s)
DSW	Don South-West
EnQuest	EnQuest Heather Limited
ESDU	Extension Subsea Distribution Unit
ESDV	Emergency Shutdown Valve
Expansion spool	Pipespool
FPF	(Northern Producer) Floating Production Facility
FPSO	Floating Production Storage & Offloading Vessel
GMG	Global Marine Group
HSE	Health and Safety Executive
", in	Inch; 25.4 millimetres
Ident	Pipeline identification number as used in Pipeline Works Authorisations
Installation	Offshore structure, typically comprising topsides and jacket, or a subsea wellhead protection structure, subsea manifold structure, an FPF or FPSO
IMO	International Maritime Organisation
km	Kilometre
m	Metre(s)
MARPOL	International Convention for the Prevention of Pollution from Ships
MAT, SAT	Master Application Template, Supplementary Application Template
MSV	Multipurpose Support Vessel
N,S,E,W	North, South, East, West
n/a	Not Applicable
N/A	(Information) Not Available or specified
NFFO	National Federation of Fishermen's Organisations
NIFPO	Northern Ireland Fish Producers Organisation Ltd
NLGP	Northern Leg Gas Pipeline
NORM	Naturally Occurring Radioactive Material
NP	Norther Producer
OGA	Oil and Gas Authority
OPEP	Oil Pollution Emergency Plans
OPRED	Offshore Petroleum Regulator for Environment and Decommissioning



ABBREVIATION	EXPLANATION
OSPAR	Oslo-Paris Convention
Phase 1	Phase 1 of the decommissioning activities concern the departure of the Northern Producer Floating Production Facility, removal of the associated riser systems and clearance of the 500m safety zone. The scope of the Phase 1 activities is addressed in a separate Decommissioning Programme document [1]
Phase 2	Phase 2 of the decommissioning works concerns decommissioning of the Conrie, Don South-West, West Don and Ythan installations as well as the remaining pipeline infrastructure, and is the subject of this Decommissioning Programme document
Piggybacked	Clamped or connected to another pipeline along its length
Pipeline	Pipeline or umbilical pipeline
P1, P2, WI1	Production (P) or Water Injection (WI) Tree Identifier
PL, PLU	Pipeline, Umbilical Pipeline Identification numbers (UK)
PON	Petroleum Operation Notification
PWA	Pipeline Works Authorisation
Q1, Q2, Q3, Q4	Quarter 1, Quarter 2, Quarter 3, or Quarter 4 of any given year
RBS	Riser Base Structure (part of Phase 1 decommissioning scope as distinct from RBS at Thistle)
RBMS	Riser Base Manifold Structure
ROV	Remotely Operated Vehicle
ROVSV	Remotely Operated Vehicle Support Vessel
SAC	Special Area of Conservation
SAL	Single Anchor Loading
SALB(MB)	Single Anchor Loading Buoy (Mooring Base)
SDU	Subsea Distribution Unit
SFF	Scottish Fishermen's Federation
SIMOPS	Simultaneous Operations
SOPEP	Shipboard Oil Pollution Emergency Plan
SPS	Subsea Protection Systems (www.subseaprotectionsystems.com)
SS	Subsea (in the context of wells which could also be "PL" platform), or, South-South for compass direction
SSIV	Subsea Isolation Valve
SUTU	Subsea Umbilical Termination Unit
TAQA	TAQA Bratani Limited
Te	Metric Tonne, 1000 kilogrammes force
TFSW	Trans Frontier Shipment of Waste
Thistle	Thistle Alpha installation
Topsides	Offshore structure typically furnished with reception and processing equipment for produced hydrocarbons, in this case the Northern Producer FPF
TRBS	Thistle Riser Base Structure



ABBREVIATION	EXPLANATION
TUTU	Topsides Umbilical Termination Unit
UK	United Kingdom
UKCS	United Kingdom Continental Shelf
WD	West Don
WGS84	World Geodetic System 1984
WHPS	Wellhead Protection Structure
WI	Water Injection
WS	Wye Structure
х	Number of (e.g. 16x = 16 in Number)
	PWA Idents of pipelines affected by decommissioning proposals in this document. Refer Table 1.5.1, Table 1.5.5 & Table 1.5.7.



#### 1. EXECUTIVE SUMMARY

## 1.1 Decommissioning Programmes

This Decommissioning Programme document concerns decommissioning of the Conrie, Don South-West, West Don and Ythan installations and associated pipeline infrastructure. This follows the departure of the Northern Producer Floating Production Facility, removal of the associated riser systems and clearance of the 500m safety zone, which were addressed in a separate combined Decommissioning Programme document [1]:

- Don South-West (DSW) and West Don (WD) Single Anchor Loading Buoy Mooring Base (SALBMB)
- Don South-West and West Don pipelines PL2578, PL2579, PLU2580, PLU2580JSG, and PLU2580JSO:
- Conrie wellhead protection structure (1x), and;
- Conrie pipelines PL2572 (original idents 5 to 8 only), PL2573 (original ident 18 to 21 only) and PLU2576JP4;
- Don South-West wellhead protection structures (10x), and;
- Don South-West pipelines PL2572 (excluding idents 5 to 8), PL2573 (excluding idents 18 to 21), PLU2576, PLU2576JP1 through PLU2576JP7, PLU2577, PLU2577JWI2, PLU2577JWI3, PLU2577JWI4, PL2581, PL4262, and PL4557;
- West Don wellhead protection structures (5x), and;
- West Don pipelines PL2582, PL2583, PL2584, PLU2585, PLU2585JP1, PLU2585JP2, PLU2585JP3, and PLU2585JWI1, PLU2585JWI2, and PL4261;
- Ythan wellhead protection structure (1x), and;
- Ythan pipelines PL3749, PL3751, PLU3752, PLU3753, and PLU3754.

Although decommissioning of the installations and pipelines are being treated in this document as a standalone project, on behalf of the Section 29 holders, EnQuest Heather Limited (EnQuest) will also continue to explore cost saving synergies with other projects.

### 1.2 Requirement for Decommissioning Programmes

**Installations:** In accordance with the Petroleum Act 1998, EnQuest, as owner and operator of the Don South-West & West Don SAL, Conrie, Don South-West, West Don and Ythan installations, and on behalf of the Section 29 notice holders (Table 1.4.2, Table 1.4.3, Table 1.4.4, Table 1.4.5, and Table 1.4.6), is applying to OPRED to obtain approval for decommissioning the installations detailed in Section 2 of this document. Partner Letters of Support will be provided directly to OPRED.

**Pipelines:** In accordance with the Petroleum Act 1998, EnQuest, as owner and operator of the Don South-West and West Don, Conrie, Don South-West, West Don and Ythan pipelines, and on behalf of the Section 29 notice holders (Table 1.5.2, Table 1.5.4, Table 1.5.6, Table 1.5.8 and Table 1.5.10) is applying to OPRED to obtain approval for decommissioning the pipelines detailed in Section 2 of this document. Partner Letters of Support will be provided directly to OPRED.

Following public, stakeholder and regulatory consultation, the Decommissioning Programmes are submitted in compliance with national and international regulations and OPRED guidance notes. The schedule outlined in this document is for a five-year period due to begin sometime in Q2 2025.

## 1.3 Introduction

Since May 2009, the Northern Producer Floating Production Facility has provided the export route for the Don South-West, Conrie Ythan and West Don fields that are situated within Blocks 211/13b,



211/18a, and 211/18e of the Northern North Sea sector of the United Kingdom Continental Shelf and operated by EnQuest. These fields are located approximately 527km north-north-east of Aberdeen in water depths between ~172m and ~178m. The Cessation of Production documentation for these fields is currently under consideration by the Oil and Gas Authority.

A Riser Base Structure (RBS) used to be installed on the seabed with rigid spool pieces connecting the inter-field pipelines to the RBS. Dynamic flexible risers were installed in a "lazy S" configuration and are being recovered as part of Phase 1 of the decommissioning works. Please refer Figure 1.7.2, Figure A.1.1 and Figure A.1.2.

Processed production fluids from the Fields were initially exported via PL2578, an 8in export pipeline to a submerged Single Anchor Loading Buoy (SALB) to facilitate shuttle tanker oil loading. Crude oil was then exported via the same 8in pipeline – albeit modified, to a Wye connection comingling Northern Producer and Thistle export oil for export to the Magnus Platform via PL4556. Processed gas was used as lift gas for both fields, fuel gas purposes for the installation's turbines with the excess flared. Additionally, gas is imported, normally to assist with well start-up, via the 3-inch gas pipeline (PL2579) installed between the Northern Producer riser base structure and the Thistle Platform. Between the original RBMS in the NP 500m zone and Thistle PL2579 is piggybacked onto PL2578 as far as the Wye Structure and PL4555 downstream. PL4555 used to be PL2578 before it was modified and transferred to the Thistle owners.

Processed oil from the Conrie, Don South-West and Ythan fields used to be transported via PL2572, an 8in pipeline to the Northern Producer while processed gas was imported from the Northern Producer via PL2573 a 3in pipeline. Hydraulic controls and injection chemicals used to be provided from the RBMS in the 500m zone to the DSW Subsea Distribution Unit (SDU) via PLU2576 and from there to the Conrie and DSW production wellheads via PLU2576JP1 through PLU2576JP7. Hydraulic control and injection chemicals were supplied to the Ythan production wellhead from the DSW SDU using PLU3752, PLU3753 and PLU3754. PLU3753 and PLU3574 were connected using an external SDU located next to the DSW P7 production wellhead. Hydraulic control of the four water injection wellheads WI1, WI2, WI3, and WI4 was provided via the DSW SDU using umbilical pipelines PLU2577, PLU2577JWI2, PLU2577JWI3, and PLU2577JWI4, respectively.

Water injection used to be provided from the RBSM to the DSW water injection wellheads WI1 and WI2 using PL2581, an 8in pipeline, although for integrity reasons this pipeline was taken out of service and replaced with PL4262, which is an 8in pipeline routed to DSW WI4.

PL2572 is piggybacked onto PL2573 and both lie in the same trench as PLU2576 and are overlain with deposited rock. PLU2577 and PL2581 were laid separately and trenched and buried in the seabed. PL4262 was surface laid but buried under deposited rock.

Processed oil from the West Don fields used to be transported via PL2583, an 8in pipeline to the Northern Producer while processed gas was imported from the Northern Producer via PL2584 a 3in pipeline. PL2584 is piggybacked onto PL2583. Hydraulic controls and injection chemicals used to be provided from the RBMS in the 500m zone to the WD Subsea Distribution Unit (SDU) via PLU2585 and on to the WD production wells P1, P2, and P3 using PLU2585JP1, PLU2585JP2, and PLU2585JP3, respectively.

Water injection used to be provided from the RBSM to the WD water injection wellhead WI1 using PL2582, an 8in pipeline, although for integrity reasons this pipeline was taken out of service and replaced with PL4261, which is also an 8in pipeline routed to WD WI1.

PL2584 is piggybacked onto PL2583 and lie in the same trench. PL2582 and PLU2585 were laid separately and trenched and buried in the seabed except within the original NP 500m zone where they are overlain with deposited rock. PL4261 was surface laid but buried under deposited rock.

Note that there are several items of equipment such as protection and stabilisation features around the Wye Structure that are also used for part of the Thistle 'A' pipeline infrastructure (i.e. PL4555) and within the Thistle 'A' 500m zone including the Subsea Isolation Valve (SSIV) skid and riser bases.



The decommissioning proposals for these are explained in the relevant sections of the Decommissioning Programmes. Please refer Figure 1.7.3 and various figures in Appendix B for the scope of the Phase 2 Decommissioning Programmes contained herein.

The Decommissioning Programmes explain the principles of the removal activities and are supported by a comparative assessment for the pipelines [2] and an environmental appraisal [3].



# 1.4 Overview

## 1.4.1 Installations

		Table 1.4.1 Installations Being Decommissioned							
Field Names, UK	CS Block(s),	Production	Surface Installations			Distances			
Field Installation ID	UKCS Block(s)	Type of Production	Number	Function	Туре	Topsides Weight (Te)	Jacket Weight (Te)	Distance to Median (Norway)	Distance from UK coastline
Conrie	211/18a	Oil	n/a	n/a	n/a	n/a	n/a	~9.7km	
Don South-West	211/18c	Oil	n/a	n/a	n/a	n/a	n/a	~9.7km	~527km NNE
West Don	211/18b	Oil	n/a	n/a	n/a	n/a	n/a	~14.2km	of Aberdeen
Ythan	211/18e	Oil	n/a	n/a	n/a	n/a	n/a	~9.7km	
SALB (DSW & WD)	211/18b & 211/18c	n/a	n/a	n/a	n/a	n/a	n/a	~13.2km	~521km NNE of Aberdeen
	Drill C	uttings	Subsea Installations				Numbe	er of Wells	
Field Installation ID	Drill Cuttings Pile(s)	Total Estimated Volume (m <sup>3</sup> )	Water Depth	Number	Туре	Platform Subsea		sea	
Conrie	n/a	n/a	~174m	1	WHPS	n/a	a	1	
Don South-West	n/a	n/a	~165m to ~174m	10	WHPS	n/a 10		0	
West Don	n/a	n/a	~172m to ~178m	5	WHPS	n/a	n/a 5		5
Ythan	n/a	n/a	~174m	1	WHPS	n/a 1		1	
SALB	n/a	n/a	~170m	1	SALB	n/a n/a		/a	



## 1.4.2 Don South-West & West Don SAL Installation

Table 1.4.2: DSW & WD SAL Installation - Section 29 Notice Holders Details					
Section 29 Notice Holder	Registration Number	License Equity Interest (%)			
EnQuest Heather Limited	02748866	69.3%			
EnQuest PLC	07140891	-			
Ithaca Oil and Gas Limited	01546623	30.7%			
Ithaca Energy (UK) Limited	SC272009	-			
Ithaca Alpha (N.I.) Limited	NI073431	-			
Ithaca Petroleum Limited	05223667	•			

## 1.4.3 Conrie Installation

Table 1.4.3: Conrie Installation - Section 29 Notice Holders Details						
Section 29 Notice Holder Registration Number License Equity Interest (%)						
EnQuest Heather Limited	02748866	60.0%				
EnQuest PLC	07140891	-				
Ithaca Energy (UK) Limited	SC272009	40.0%				
Ithaca Petroleum Limited	05223667	-				

## 1.4.4 Don South-West Installations

Table 1.4.4: Don South-West Installations - Section 29 Notice Holders Details		
Section 29 Notice Holder	Registration Number	License Equity Interest (%)
EnQuest Heather Limited	02748866	60.0%
EnQuest PLC	07140891	•
Ithaca Oil and Gas Limited	01546623	40.0%
Ithaca Energy (UK) Limited	SC272009	-
Ithaca Petroleum Limited	05223667	-

# 1.4.5 West Don Installations

Table 1.4.5: West Don Installations - Section 29 Notice Holders Details		
Section 29 Notice Holder	Registration Number	License Equity Interest (%)
EnQuest Heather Limited	02748866	78.60%
EnQuest PLC	07140891	-
Ithaca Oil and Gas Limited	01546623	21.40%
Ithaca Alpha (N.I.) Limited	NI073431	-
Ithaca Energy (UK) Limited	SC272009	-
Ithaca Petroleum Limited	05223667	-



## 1.4.6 Ythan Installation

Table 1.4.6: Ythan Installations - Section 29 Notice Holders Details		
		License Equity Interest (%)
EnQuest Heather Limited	02748866	60.0%
EnQuest PLC	07140891	-
Ithaca Gamma Limited	05929104	40.0%
Ithaca Petroleum Limited	05223667	-

# 1.5 Pipelines

# 1.5.1 Don South-West & West Don Fields - Pipelines

Table 1.5.1: DSW & WD Pipelines Being Decommissioned		
Number of Pipelines, Cables, Umbilicals	5	Refer Table 2.1.2

Table 1.5.2: DSW & WD Pipelines - Section 29 Notice Holders Details		
Section 29 Notice Holder	Registration Number	License Equity Interest (%)
EnQuest Heather Limited	02748866	69.30%
EnQuest PLC	07140891	-
Ithaca Oil and Gas Limited	01546623	30.7%
Ithaca Energy (UK) Limited	SC272009	-
Ithaca Gamma Limited	05929104	-
Ithaca Petroleum Limited	05223667	-

# 1.5.2 Conrie Field - Pipelines

Table 1.5.3: Conrie Pipelines Being Decommissioned		
Number of Pipelines, Cables, Umbilicals	3	Refer Table 2.2.2

Table 1.5.4: Conrie Pipelines - Section 29 Notice Holders Details		
Section 29 Notice Holder	Registration Number	License Equity Interest (%)
EnQuest Heather Limited	02748866	60.0%
EnQuest PLC	07140891	-
Ithaca Energy (UK) Limited	SC272009	40.0%
Ithaca Petroleum Limited	05223667	-
Ithaca Gamma Limited	05929104	-



# 1.5.3 Don South-West Field - Pipelines

Table 1.5.5: Don South-West Pipelines Being Decommissioned		
Number of Pipelines, Cables, Umbilicals	18	Refer Table 2.3.2

Table 1.5.6: Don South-West Pipelines - Section 29 Notice Holders Details		
Section 29 Notice Holder	Registration Number	License Equity Interest (%)
EnQuest Heather Limited	02748866	60.0%
EnQuest PLC	07140891	-
Ithaca Oil and Gas Limited	01546623	40.0%
Ithaca Energy (UK) Limited	SC272009	-
Ithaca Gamma Limited	05929104	-
Ithaca Petroleum Limited	05223667	-

# 1.5.4 West Don Field - Pipelines

Table 1.5.7: West Don Pipelines Being Decommissioned		
Number of Pipelines, Cables, Umbilicals	10	Refer Table 2.4.2

Table 1.5.8: West Don Pipelines - Section 29 Notice Holders Details			
Section 29 Notice Holder	Registration Number	License Equity Interest (%)	
EnQuest Heather Limited	03351775	78.6%	
EnQuest PLC	07140891	•	
Ithaca Oil and Gas Limited	01546623	21.4%	
Ithaca Energy (UK) Limited	SC272009	-	
Ithaca Alpha (N.I.) Limited	NI073431	-	
Ithaca Petroleum Limited	05223667	-	

# 1.5.5 Ythan Field - Pipelines

Table 1.5.9: Ythan Pipelines Being Decommissioned		
Number of Pipelines, Cables, Umbilicals	5	Refer Table 2.5.2

Table 1.5.10: Ythan Pipelines - Section 29 Notice Holders Details								
Section 29 Notice Holder Registration Number License Equity Interest (%)								
EnQuest Heather Limited	02748866	60.0%						
EnQuest PLC	07140891	-						



Table 1.5.10: Ythan Pipelines - Section 29 Notice Holders Details							
Section 29 Notice Holder Registration Number License Equity Interest (%)							
Ithaca Gamma Limited	05929104	40.0%					
Ithaca Petroleum Limited	05223667						

# 1.6 Summary of Proposed Decommissioning Programmes

Table 1.6.1: Summary of Decommissioning Pro	grammes
Proposed Decommissioning Solution	Reason for Selection
1. Installations	
Complete removal. The Conrie, Don South-West, West Don and Ythan installations and Single Anchor Loading Buoy Mooring Base (SALBMB) will be fully removed, taken to shore, dismantled, and recycled unless alternative re-use options are found by the owner to be viable and more appropriate.	requirements. Allows installations
Note that the SALBMB will be removed at the same time as when decommissioning works associated with the Thistle Wye Structure are carried out.	
Any permit applications required for work associated with removal of the installations will be submitted to the regulator as required.	
2. Pipelines	
All the surface laid pipelines associated with the Conrie, Don South-West, West Don and Ythan infrastructure will be cleaned and flushed and fully removed. This will remove potential snagging hazards from the area.	
Sections of pipelines that are trenched and buried, either in the seabed (PLU2577, PL2581, PL2582 and PLU2585) or buried under rock (PL2578 & PL2579, PL2572 & PL2573, PL2583 & PL2584, PL4261, PL4262, and PLU2576) will be left <i>in situ</i> .	
The Don South-West pipelines cross over the Don field pipelines PL598, PL599, PL600 and the 4" control umbilical. As these are also being left <i>in situ</i> , they will be unaffected by the decommissioning of the DSW pipelines (PL2572, PL2573, PLU2577, PL2581, and PL4262.	
In order to explore synergistic opportunities PLU2580 (which incorporates PLU2580JSO and PLU2580JSG) and associated infrastructure such as riser bases (PLU2580 & PL2579), SSIV skids and pipelines within the Thistle 'A' 500m safety zone will likely be decommissioned at the same time as the Thistle 'A' installation and infrastructure.	
Note that the protection and stabilisation features associated with PL2579 as it by-passes the Wye Structure also protect and stabilise PL4555 which belongs to the Thistle owners. These features will be left <i>in situ</i> until PL4555 is decommissioned. This is explained in the relevant tables in the Decommissioning Programmes herein.	
The SSIV and Riser Bases at Thistle 'A' will be left <i>in situ</i> meantime pending decommissioning of the Thistle pipelines and infrastructure inside the Thistle 'A' 500m safety zone.	
Any permit applications required for work associated with pipeline pigging, flushing, cutting and removal will be submitted to the regulator as required.	
3. Wells	
The wells associated with the Don South-West, Conrie, Ythan and West	



Don fields will be decommissioned to comply with HSE "Offshore regulatory requirements.

#### **Table 1.6.1: Summary of Decommissioning Programmes**

Installations and Wells (Design and Construction, etc.) Regulations 1996" and in accordance with the latest version of the Oil & Gas UK Well Decommissioning Guidelines.

Depending on the complexity of requirements the wells will most likely be decommissioned using a semi-submersible drilling rig. A Master Application Template (MAT) and the supporting Subsidiary Application Template (SATs) will be submitted in support of activities carried out; a PON5 application will be submitted to OGA to decommission the wells.

#### 4. Interdependencies

The decommissioning works will be carried out in two phases. 1) Departure of the Northern Producer and removal of snagging hazards in and around the 500m zone; 2) decommissioning of remaining installations and infrastructure. Phase 1 is being dealt with using separate Decommissioning Programmes.

All of the installations will be removed.

No third-party pipeline crossings will be disturbed as a result of the decommissioning proposals.

Pipeline stabilisation features such as concrete mattresses and any grout bags found that are exposed (i.e. not buried under deposited rock) will be removed as part of the pipeline decommissioning activities. Although some deposited rock may be disturbed during the removal activities, it will remain *in situ*.

In order to explore synergistic opportunities and efficiencies in operational activity and cost, it's possible that the pipelines around the Wye structure (PL2578 & PL2579) will be dealt with at the same time as Wye structure and Thistle pipelines PL4555 & PL4556 and within the Thistle 500m safety zone, PL2579, PLU2580, PLU25480JSO and PLU2580JSG will be decommissioned at the same time as the Thistle infrastructure.



# 1.7 Field Locations including Field Layout and Adjacent Facilities

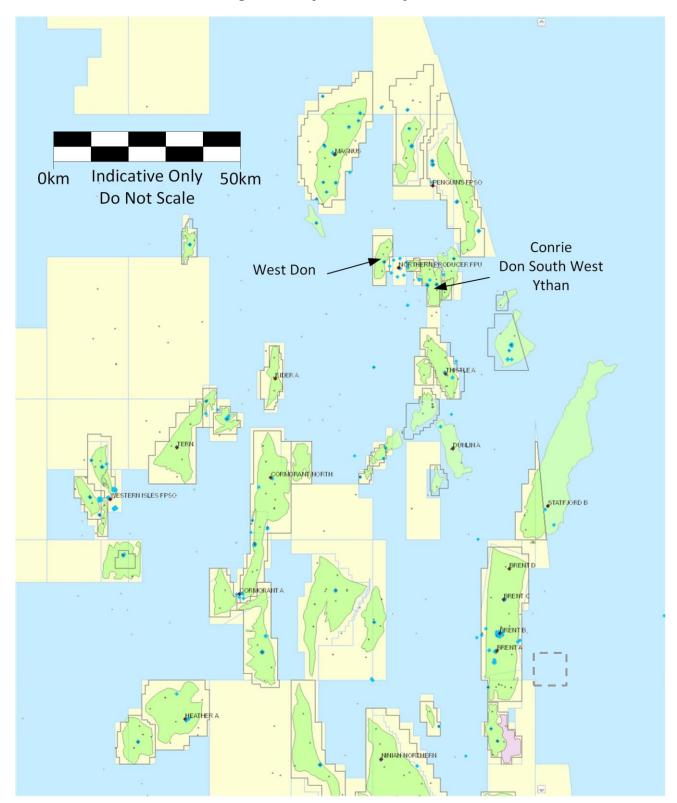


Figure 1.7.1: Northern Producer adjacent fields and surface facilities



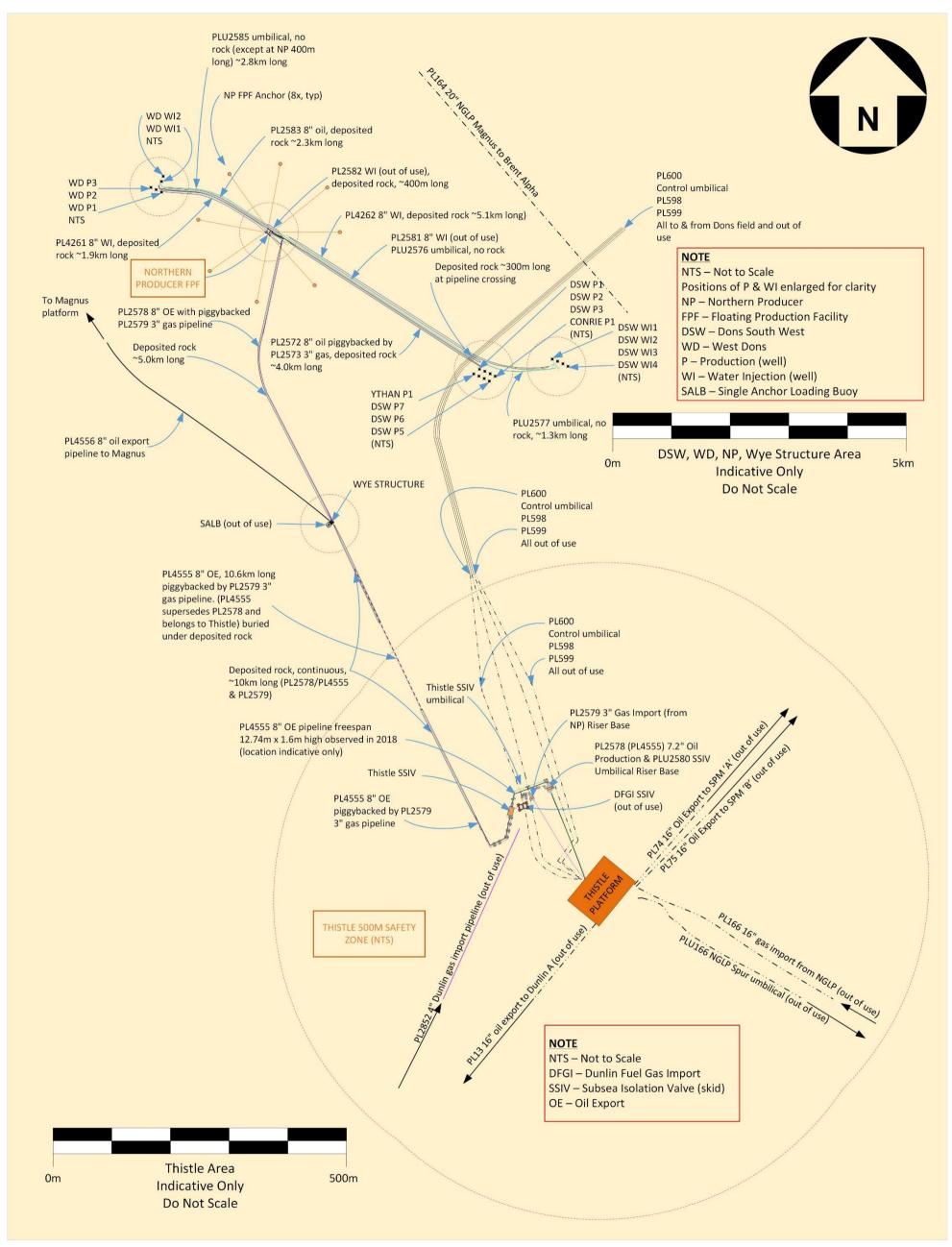


Figure 1.7.2: Phase 1 DP Scope - Northern Producer and its locality



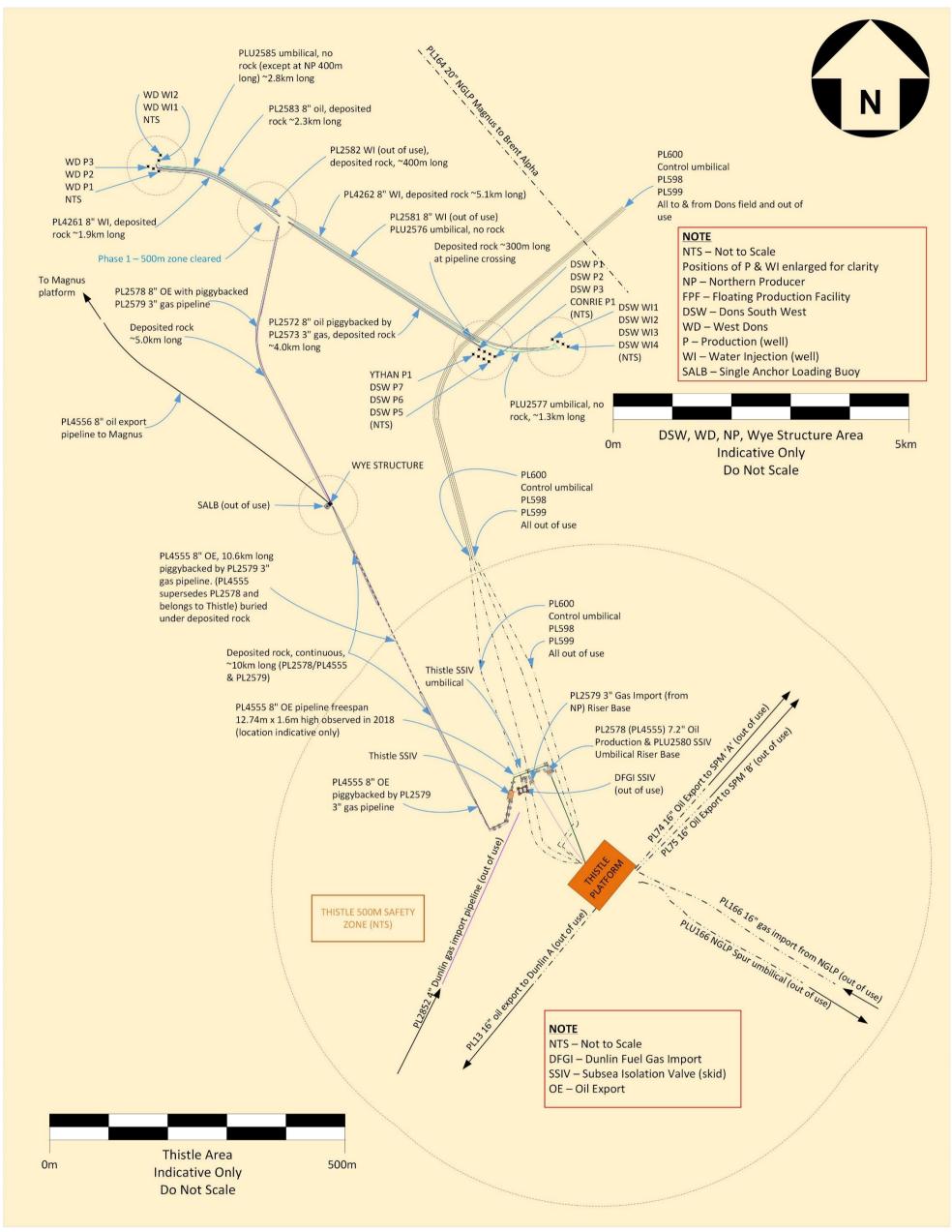


Figure 1.7.3: Phase 2 DP Scope - after completion of Phase 1 DP Scope in 500m Zone



	Table 1.7.1: Adjacent Facilities									
Owner	Name	Туре	Distance and Direction from SALB	Distance and Direction from DSW Centre	Direction & Distance from WD Centre	Information	Status			
EnQuest	Don South-West	10x WHPS	NE, ~3.7km	n/a	ESE, ~6.7km		Operational			
EnQuest	West Don	5x WHPS	NW, ~6.4km	NWW, ~6.8km	n/a		Operational			
EnQuest	Conrie	1x WHPS	NE, ~3.7km	n/a	ESE, ~6.7km		Operational			
EnQuest	Ythan	1x WHPS	NE, ~3.7km	n/a	ESE, ~6.7km		Operational			
EnQuest	SALB	SALB	n/a	SW, 4.1km	SE, 6.4km	Former export route for NP	Non-operational			
EnQuest	Wye Structure	Manifold	0km	SW, 4.0km	SE, 6.4km	Most recent export route for NP & Thistle 'A'	Operational			
Shell UK Limited	Penguins	FPSO	N, 15.8km	NNW, 12.9km	NNE, 11.5km		Operational			
EnQuest	SALM	SALM Base	SE, 9.7km	SSE, 10.5km	SE, 16km	Former export route for Thistle 'A'	Out of Use			
EnQuest	Thistle 'A'	Fixed steel jacket	SE, 10.4km	SSE, 12km	SE, 16.7km	Former export route for NP	Non-operational			
EnQuest	Magnus	Fixed steel jacket	NW, 21.7km	NW, 21km	NW, 15.3km	Current export route for NP & Thistle 'A'	Operational			
CNR & Wintershall Norsk AS	Murchison	Jacket Footings	E, 14.5km	ESE, 13.1km	ESE, 19.8km		Decommissioned			
TAQA	Eider	Fixed steel jacket	SW, 19.9km	SW, 23.9km	SSW, 21km	Topsides DP approved April 2020	Non-operational			

## **Impacts of Decommissioning Proposals**

There are no direct impacts on adjacent facilities from the decommissioning works associated with Conrie, Don South-West, West Don and Ythan installations and associated pipeline infrastructure.

As part of the operational phase any potential environmental impacts will be mitigated in two ways. The first is via direct communication with the parties involved, and the other is via submission of the MATs and SATs.



## 1.8 Industrial Implications

The activities to disconnect or sever and recover the Conrie, DSW, WD and Ythan installations, surface laid pipelines and associated structures, and protection and stabilisation features will be completed using one or a combination of vessels including ROV Support Vessel (ROVSV), Construction Support Vessel (CSV), Multi Support Vessel (MSV) and Anchor Handling Vessel (AHV).

It is the intention of the respective owners of the installation and pipelines to develop a contract strategy and Supply Chain Action Plan that will result in an efficient and cost-effective execution of the decommissioning works. Where appropriate existing framework agreements may be used for decommissioning of the pipelines and pipeline stabilisation features. EnQuest will seek to combine the decommissioning activities with other development or decommissioning activities to reduce mobilisation costs should the opportunity arise. The decommissioning schedule is extended to allow flexibility for when decommissioning operations are carried out and completed.



# 2. <u>DESCRIPTION OF ITEMS TO BE DECOMMISSIONED</u>

No surface Installations are being decommissioned as part of the proposals contained herein.

## 2.1 Don South-West and West Don Assets

## 2.1.1 Subsea Installations including Stabilisation Features

	Table 2.1.1: DSW & WD Subsea Installation Information									
Subsea Installations		Mana (Ta)	Loc	ation						
Including Stabilisation Features	Number	Mass (Te) / Size (m)	WGS84 Decimal	WGS84 Decimal Minute	Comments/ Status					
SALB	1	103.1 13x13x8.1	61.495608° N 01.428825° E	61° 29.7365' N 01° 25.7295' E	Refer Figure 1.7.2 and Figure B.4.1. Note that PL4557 on the SALB is noted on the Section 29 for the DSW owners.					
Concrete mattresses	n/a	n/a	n/a	n/a	n/a					
Grout bags	n/a	n/a	n/a	n/a	n/a					
Formwork	n/a	n/a	n/a	n/a	n/a					
Deposited rock	n/a	n/a	n/a	n/a	n/a					
Other	n/a	n/a	n/a	n/a	n/a					



# 2.1.2 Pipelines including Stabilisation Features

			Tab	le 2.1.2: C	SW & WD Pipeline/F	lowline/Um	bilical Informatio	n		
Description	Pipeline Number (as per PWA)	PWA Ident⁴	Diameter (NB) (inches) <sup>1</sup>	Length (m)	Description of Component Parts	Product Conveyed	From – To End Points <sup>2</sup>	Burial Status	Pipeline Status <sup>5</sup>	Current Content <sup>5</sup>
Oil export pipeline	PL2578	4	8"	5,086	Carbon steel flowline	Oil	RBS Expansion spool flange to WS	Trenched and buried under deposited rock between KP0.002 and KP5.047	Out of use	Inhibited seawater
	6	3"	5,086	Carbon steel flowline	Gas	Start & finish of flowline on approach to WS	Same trench as PL2578 buried under deposited rock	Out of use	Inhibited seawater	
		7	3"	45	Expansion spool		By-passes WS	Surface laid, covered with concrete mattresses		
Gas import/export pipeline	PL2579 8 3"	3"	10,089	Carbon steel flowline		Downstream of WS to expansion spool upstream of Thistle SSIV	Trenched and buried under deposited rock between KP5.214 and KP15.264		Inhibited	
		9 3"	30	Expansion spools	Gas	Between end of flowline and Thistle SSIV	Surface laid, partly covered with concrete	Out of use	seawater	
	10	10 3" 7				Between Thistle SSIV and TRBS	mattresses			
		11	175.9mm	300	Flexible riser		TRBS to Thistle ESDV	Suspended in water column		



	Table 2.1.2: DSW & WD Pipeline/Flowline/Umbilical Information										
Description	Pipeline Number (as per PWA)	PWA Ident <sup>4</sup>	Diameter (NB) (inches) <sup>1</sup>	Length (m)	Description of Component Parts	Product Conveyed	From – To End Points <sup>2</sup>	Burial Status	Pipeline Status <sup>5</sup>	Current Content <sup>5</sup>	
	PLU2580	1-4	87mm	300	Static umbilical	Hydraulic fluids	Thistle TUTU to Thistle SSIV SUTU	Suspended in water adjacent to Thistle 'A' installation			
Control	PLU2580JSO	1-2	66mm	105				Surface laid and	Out of use	Hydraulic	
umbilical	PLU2580JSG	1-2	66mm	40-	Flexible thermoplastic umbilical	Hydraulic fluids	TRBS to Thistle SSIV	intermittently protected and stabilised by concrete mattresses and grout bags	Out of use	fluids	

## NOTES

- 1. If diameter is expressed in mm it refers to outside diameter of umbilical;
- 2. For brevity, the description of the end-to-end points may differ slightly from those consented;
- 3. PL2578 idents 1-3 and PL2579 idents 1-5 are to be removed as part of Phase 1 of the decommissioning works and are therefore not listed here;
- 4. PWA Idents highlighted in green are affected by proposals in the Decommissioning Programmes that address Phase 1. Decommissioning of the remaining sections of pipelines are addressed by proposals herein;
- 5. Pipeline status and current content assume that the Northern Producer has departed with the pipeline and umbilicals dealt with accordingly.



	Та	ble 2.1.3: DSV	V & WD Subsea Pipeline S	tabilisation Features & Structu	ires	
Stabilisation Feature	Total	Total Mass	Lo	cation(s)		
& Size (m)	Number	(Te)	WGS84 Decimal (If quoted):	WGS84 Decimal Minute (If quoted)	Exposed/Buried/Condition	
			PL2578 (& PL2579) 13x Note to WS;	North of WS; and 1x on approach		
			PL2579 9x South of WS. I	Refer Figure B.4.1.	Burial status will be determined when	
Concrete mattresses <sup>1</sup>	46	150.9	DFGI SSIV; 1x between D	er Base, 2x between TRBS and DFGI SSIV and Thistle SSIV; 15x It trench and Thistle SSIV. Refer	out. Assumed exposed, resting on seabed.	
			PLU2580JSO/PLU2580JSSIV. Refer Figure B.5.1.	SG 3x Between TRBS and Thistle	Burial status will be determined when decommissioning activities are being carried out. Assumed exposed, resting on seabed.	
Grout bags (25kg) <sup>3</sup>	1280	32.0	<b>PLU2580</b> 1280x in and are B.5.1.	ound the TRBS. Refer Figure	Burial status will be determined when decommissioning activities are being carried out. Assumed exposed, resting on seabed.	
Deposited rock <sup>4</sup>	n/a	18,784	~5,9km long) upstream of	veen KP0.002 and KP5.047 (i.e. the Wye Structure from the riser rn Producer 500m zone. Refer	·	
·	n/a	38,593		veen KP5.214 and KP10,050 (i.e. am of the Wye Structure towards 7.2.		
PL2578 8" Oil Export and PLU2580 Thistle 3" SSIV			61.366030° N	61° 21.9618' N		
umbilical riser base and protection structure (6.1m x 2.8m x 0.5m) <sup>6</sup>	1	62.5	01.577850° E Refer Figure B.5.1	01° 34.6710' E Refer Figure B.5.1	Burial status will be determined wher decommissioning activities are being carried out. Assumed exposed, resting on seabed.	
PL2579 3" SSIV & Protection Structure (6m x 3.5m x 3.0m) <sup>6</sup>		34.0	61.365680° N 01.576722° E	61° 21.9408' N 01° 34.6033' E		



Table 2.1.3: DSW & WD Subsea Pipeline Stabilisation Features & Structures								
Stabilisation Feature	Total	Total Mass	Loca	ation(s)				
& Size (m)	Number	(Te)	WGS84 Decimal (If quoted):	WGS84 Decimal Minute (If quoted)	Exposed/Buried/Condition			
			Refer Figure B.5.1	Refer Figure B.5.1				
PL2579 3" gas import riser base and protection structure (3.8m x 2.8m x 0.5m) <sup>6</sup>	1	29.0	61.365887° N 01.577325° E Refer Figure B.5.1	61° 21.9532' N 01° 34.6395' E Refer Figure B.5.1				

#### NOTES:

- 1. Concrete mattresses are 'SPS' type: 6m x 2m x 0.15m (Approx. mass each mattress 3.14Te) or 6m x 3m x 0.15m (Approx. mass each mattress 4.72Te);
- 2. All concrete mattresses near the Wye Structure and on approach to Thistle 'A' installation will be left *in situ* meantime pending decommissioning of **PL4555** and the Thistle related pipeline infrastructure;
- 3. Quantity of grout bags is an estimate as the as-built details are not definitive;
- 4. The quantity of deposited rock is estimated or based on the original deposit consent.
- 5. The section of PL2578 downstream of the Wye Structure to Thistle 'A' was renumbered PL4555 with its ownership transferred to the Thistle owners;
- 6. The SSIV and Riser Bases at Thistle 'A' will be left *in situ* meantime pending decommissioning of the Thistle pipelines and infrastructure inside the Thistle 'A' 500m safety zone.



#### 2.1.3 Material Inventory Estimates

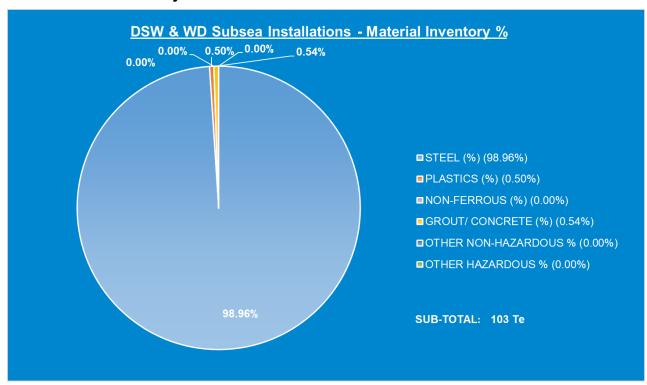


Figure 2.1.1: Pie-Chart of Material Inventory for DSW & WD Installation

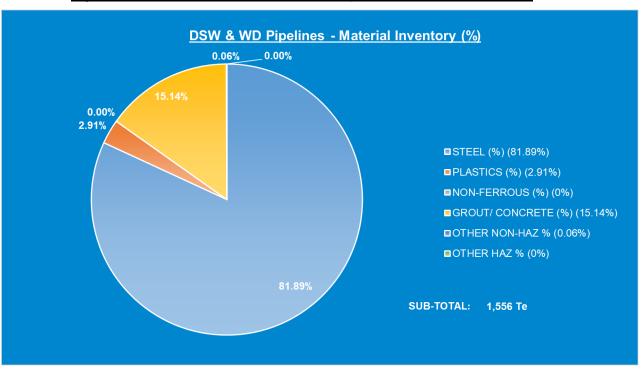


Figure 2.1.2: Pie-Chart of Material Inventory for DSW & WD Pipelines<sup>1</sup>



<sup>&</sup>lt;sup>1</sup> Material inventory includes Phase 1 materials

# 2.2 Conrie Related Assets

# 2.2.1 Subsea Installations including Stabilisation Features

	Table 2.2.1: Conrie Subsea Installation Information									
Subsea			Loca	ation						
Installations Including Stabilisation Features	Number	Mass (Te) / Size (m)	WGS84 Decimal	WGS84 Decimal Minute	Comments/ Status					
Conrie WHPS	1	55.9 8.8m x 9.2m x 6.7m	61.468580° N 01.535337° E	61° 28.1148' N 01° 32.1202' E						
Concrete mattresses	n/a	n/a	n/a	n/a	n/a					
Grout bags	n/a	n/a	n/a	n/a	n/a					
Formwork	n/a	n/a	n/a	n/a	n/a					
Deposited rock	n/a	n/a	n/a	n/a	n/a					
Other	n/a	n/a	n/a	n/a	n/a					



## 2.2.2 Pipelines including Stabilisation Features

	Table 2.2.2: Conrie Pipeline/Flowline/Umbilical Information										
Pipeline Number (as per PWA)	PWA Ident	Diameter (NB) (inches) <sup>1</sup>	Length (m)	Description of Component Parts	Product Conveyed	From – To End Points <sup>2</sup>	Burial Status	Pipeline Status <sup>3</sup>	Current Content3		
PL2572	5-8 <sup>3</sup>	8"	38m	Pipespool, duplex	Oil	DBBV at DSW P5 production tree to DSW P4 (Conrie) production tree	Surface laid,	Out of use	Inhibited seawater		
PL2573	18-21	3"	40m	Pipespool, carbon steel	Gas	DSW P4 (Conrie) production tree to DSW P5 production tree	protected by concrete	Out of use	Inhibited seawater		
PLU2576JP4	1-8	114.5mm	75m	Umbilical jumper	Methanol & hydraulic fluids	DSW SDU to DSW Well P6	mattresses	Out of use	Seawater		

# NOTES

- 1. If diameter is expressed in mm it refers to outside diameter of electrical cable or umbilical pipeline;
- 2. For brevity, the description of the end-to-end points may differ slightly from those consented;
- 3. Pipeline status and current content assume that the Northern Producer has departed with the pipeline and umbilicals dealt with accordingly.

	Table 2.2.3: Conrie Pipeline Stabilisation Features & Structures								
Stabilisation Feature & Size (m)	Exposed/Buried/Condition								
Congrete mettresses	17	28.3	PL2572 (5-8) 6x between DSW P5 & Conrie Well P1. Refer Figure B.1.1.						
Concrete mattresses <sup>1</sup>	11	34.6	PL2576JP4 11x SDU and Conrie Well P1. Refer Figure B.1.1.	Latest survey information suggests the concrete					
			PL2572 (5-8) 40x between P5 and Conrie Well P1. Refer Figure B.1.1.	mattresses and grout bags are					
Grout bags <sup>2</sup>	80	2.0	<b>PL2573 (18-21)</b> between Conrie Well P1 & DSW P5, as per <b>PL2572 (5-8)</b> . Refer Figure B.1.1.	exposed.					



Table 2.2.3: Conrie Pipeline Stabilisation Features & Structures							
Stabilisation Feature & Size (m)	Exposed/Buried/Condition						
			PL2576JP4 40x DSW SDU and Conrie Well P1. Refer Figure B.1.1.				
Deposited rock	n/a	n/a	n/a	n/a			

## NOTES:

- 1. Concrete mattresses are 'SPS' type: 6m x 2m x 0.15m (Approx. mass each mattress 3.14Te) or 6m x 3m x 0.15m (Approx. mass each mattress 4.72Te);
- 2. The quantity of 25kg grout bags is estimated because the as-built data are not explicit.



#### 2.2.3 Well Information

Table 2.2.4: Conrie Well Information								
Well ID Designation Status Category of Well								
211/18a-S7	Oil production	Shut in	SS 1-1-1					

For details of well categorisation please refer the latest version of the Oil and Gas UK Guidelines for the Decommissioning of wells. Well status is stated on the assumption that Northern Producer has departed.

#### 2.2.4 Material Inventory Estimates

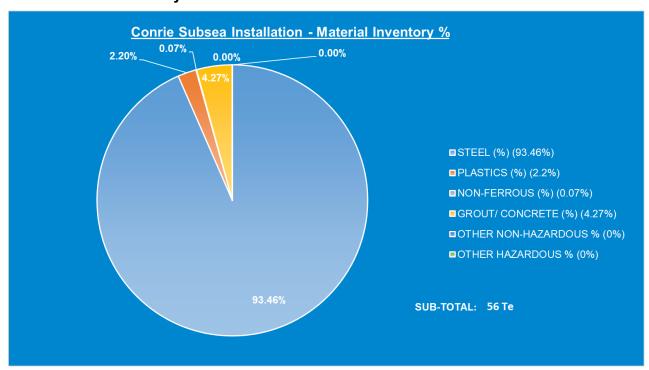


Figure 2.2.1: Pie-Chart of Material Inventory for Conrie Installation

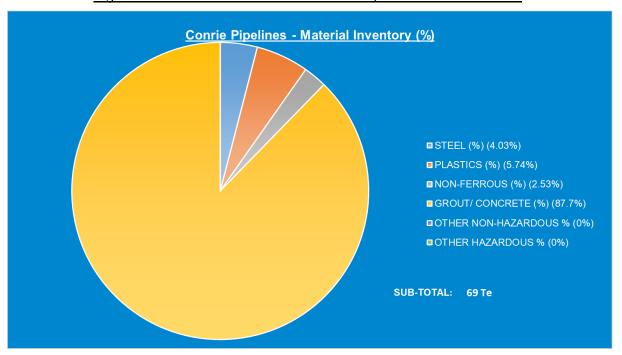


Figure 2.2.2: Pie-Chart of Material Inventory for Conrie Pipelines



## 2.3 Don South-West Assets

# 2.3.1 Subsea Installations including Stabilisation Features

Table 2.3.1: DSW Subsea Installation Information											
Subsea			Loca								
Installations Including Stabilisation Features	Number	Mass (Te) / Size (m)	WGS84 Decimal	WGS84 Decimal Minute	Comments/ Status						
DSW P1	1	55.9 8.8x9.2x6.7	61.468730° N 01.533833° E	61° 28.1238' N 01° 32.0300' E							
DSW P2	1	55.9 8.8x9.2x6.7	61.468672° N 01.534322° E	61° 28.1203' N 01° 32.0593' E							
DSW P3	1	55.98.8x9.2x6.7	61.468622° N 01.534825° E	61° 28.1173' N 01° 32.0895' E							
DSW P5	1	55.9 8.8x9.2x6.7	61.468108° N 01.535095° E	61° 28.0865' N 01° 32.1057' E							
DSW P6	1	55.9 8.8x9.2x6.7	61.468155° N 01.534605° E	61° 28.0893' N 01° 32.0763' E							
DSW P7	1	55.9 8.8x9.2x6.7	61.468208° N 01.534083° E	61° 28.0925' N 01° 32.0450' E							
DSW WI1	1	55.9 8.8x9.2x6.7	61.469517° N 01.557117° E	61° 28.1710' N 01° 33.4270' E							
DSW WI2	1	55.9 8.8x9.2x6.7	61.469387° N 01.557450° E	61° 28.1632' N 01° 33.4470' E							
DSW WI3	1	55.9 8.8x9.2x6.7	61.469283° N 01.557767° E	61° 28.1570' N 01° 33.4660' E							
DSW WI4	1	55.9 8.8x9.2x6.7	61.469125° N 01.558122° E	61° 28.1475' N 01° 33.4873' E							
Concrete mattresses	n/a	n/a	n/a	n/a	n/a						
Grout bags	n/a	n/a	n/a	n/a	n/a						
Formwork	n/a	n/a	n/a	n/a	n/a						
Deposited rock	n/a	n/a	n/a	n/a	n/a						
Other	n/a	n/a	n/a	n/a	n/a						



# 2.3.2 Pipelines including Stabilisation Features

Table 2.3.2: DSW Pipeline/Flowline/Umbilical Information										
Description	Pipeline Number (as per PWA)	PWA Ident <sup>4</sup>	Diameter (NB) (inches) <sup>1</sup>	Length (m)	Description of Component Parts	Product Conveyed	From – To End Points <sup>2</sup>	Burial Status	Pipeline Status <sup>5</sup>	Current Content <sup>5</sup>
Oil pipeline	PL2572	1-4 & 9- 28 incl.	8"/6"	4,302	Duplex & carbon steel expansion spools & gate valves	Oil	Production Tree P7 to cut point at start of trench	Surface laid, covered with concrete mattresses	Out of use	Inhibited seawater
Gas lift pipeline	PL2573	6-33 incl.	3"	4,312	Carbon steel expansion spools & gate valves	Gas	Cut point at start of trench to production Xmas tree P7 via P1,P2,P3,P5,P6	Surface laid covered with concrete mattresses	Out of use	Inhibited seawater
Static umbilical	PLU2576	Cores 1 to 8	114.5mm	4,162	Static umbilical jumpers	Chemicals, methanol, hydraulic fluids	Cut point in start of trench to DSW SUTU	Exposed	Out of use	Seawater
Static umbilical	PLU2576	DSW JS1 to 8	114.5mm	10	Static umbilical jumpers	Chemicals, methanol, hydraulic fluids	Between DSW SUTU and SDU	Exposed	Out of use	Seawater
Umbilical jumper	PLU2576JP1	1 to 4 5 to 8	114.5mm	76	Static umbilical jumpers	Chemicals, methanol, hydraulic fluids	DSW SDU to P1	Exposed	Out of use	Seawater
Umbilical jumper	PLU2576JP2	1 to 4 5 to 8	114.5mm	75	Static umbilical jumpers	Chemicals, methanol, hydraulic fluids	DSW SDU to P2	Exposed	Out of use	Seawater



	Table 2.3.2: DSW Pipeline/Flowline/Umbilical Information										
Description	Pipeline Number (as per PWA)	PWA Ident <sup>4</sup>	Diameter (NB) (inches) <sup>1</sup>	Length (m)	Description of Component Parts	Product Conveyed	From – To End Points <sup>2</sup>	Burial Status	Pipeline Status <sup>5</sup>	Current Content <sup>5</sup>	
Umbilical jumper	PLU2576JP3	1 to 4 5 to 8	114.5mm	75	Static umbilical jumpers	Chemicals, methanol, hydraulic fluids	DSW SDU to P3	Exposed	Out of use	Seawater	
Umbilical jumper	PLU2576JP5	1 to 4 5 to 8	114.5mm	115	Static umbilical jumpers	Chemicals, methanol, hydraulic fluids	DSW SDU to P5	Exposed	Out of use	Seawater	
Umbilical jumper	PLU2576JP6	1 to 4 5 to 8	114.5mm	144	Static umbilical jumpers	Chemicals, methanol, hydraulic fluids	DSW SDU to P6	Exposed	Out of use	Seawater	
Umbilical jumper	PLU2576JP7	1 to 4 5 to 8	129mm	175	Static umbilical jumpers	Chemicals, methanol, hydraulic fluids	DSW SDU to P7	Exposed	Out of use	Seawater	
Static umbilical	PLU2577	Cores 1 to 4	116.5mm	1,312	Static umbilical jumpers	Hydraulic fluids	DSW SDU to DSW WI1	Trenched and buried	Out of use	Seawater	
Static umbilical	PLU2577JWI2	Cores 1 to 4	116.5mm	30	Static umbilical jumpers	Hydraulic fluids	DSW WI1 to DSW WI2	Exposed	Out of use	Seawater	
Static umbilical	PLU2577JWI3	Cores 1 to 4	116.5mm	30	Static umbilical jumpers	Hydraulic fluids	DSW WI2 to DSW WI3	Exposed	Out of use	Seawater	
Static umbilical	PLU2577JWI4	Cores 1 to 4	116.5mm	30	Static umbilical jumpers	Hydraulic fluids	DSW WI3 to DSW WI4	Exposed	Out of use	Seawater	



	Table 2.3.2: DSW Pipeline/Flowline/Umbilical Information										
Description	Pipeline Number (as per PWA)	PWA Ident <sup>4</sup>	Diameter (NB) (inches) <sup>1</sup>	Length (m)	Description of Component Parts	Product Conveyed	From – To End Points <sup>2</sup>	Burial Status	Pipeline Status <sup>5</sup>	Current Content <sup>5</sup>	
Water injection pipeline (disused)	PL2581	1	8"	5,237	Carbon steel pipeline		Between expansion spools at pipeline ends	Trenched and buried in seabed except at Dons pipeline crossing where it is buried under deposited rock (between KP3.6 and KP3.92).	Out of use	Treated seawater	
		2	8"	27	Expansion spool		Between pipeline end flange and tree at DSW water injection wells	flange and at DSW concrete mattresses on approach to			
Replacement water injection pipeline	PL4262	PL4262 3-13	2	228.1mm	5,550	Flexible pipeline		RBS to DSW WI1	Surface laid and buried under deposited rock between KP0.12 and KP5.265		
			3-13	8"	109	Pipespools	Seawater	Between pipeline end flange and each Xmas tree at DSW water injection wells	Surface laid, covered with concrete mattresses on approach to WI trees	Out of use	Seawater



	Table 2.3.2: DSW Pipeline/Flowline/Umbilical Information											
Description	Pipeline Number (as per PWA)	PWA Ident <sup>4</sup>	Diameter (NB) (inches) <sup>1</sup>	Length (m)	Description of Component Parts	Product Conveyed	From – To End Points <sup>2</sup>	Burial Status	Pipeline Status <sup>5</sup>	Current Content <sup>5</sup>		
Oil export pipeline	PL4557	1	8"	5	Carbon steel pipespool	Oil	SALB	Mounted on SALB	Out of use	Inhibited seawater		

- 1. If diameter is expressed in mm it refers to outside diameter of umbilical;
- 2. For brevity, the description of the end-to-end points may differ slightly from those consented;
- 3. PL2572 Idents 29-31, PL2573 Idents 1-5, PLU2574, PLU2575, PLU2576JP1-8, PL4262 Ident 1 are to be removed as part of Phase 1 of the decommissioning works and are therefore not listed here:
- 4. PWA Idents highlighted in green are affected by proposals in the Decommissioning Programmes that address Phase 1. Decommissioning of the remaining sections of pipelines are addressed by proposals herein;
- 5. Pipeline status and current content assume that the Northern Producer has departed with the pipeline and umbilicals dealt with accordingly.



	Table 2.3.3: DSW Subsea Pipeline Stabilisation Features & Structures										
Ctabilization Facture			Loca	Exposed/Buried/ Condition							
Stabilisation Feature & Size (m)	Total Number	Total Mass (Te)	WGS84 Decimal WGS84 Decimal Minute (If quoted): (If quoted)								
DSW SDU & Protection Structure (8.5x5.2x3.5)	1	45.5	61.469280° N -01.534655° E	61° 28.1568' N 01° 32.0793' E	Stabilised and secured using a total						
DSW SDU & Protection Structure piles (4x)	1	34.2	Refer Figure B.1.1.	of 4x piles. Exposed.							
	10	79.1	<b>PL2572</b> 10x PL599, PL598, Contro Refer Figure B.1.1.								
	59	231.1	PL2572 18x (7x+11x) from end of d P1 & P2; 6x between P2 & P3, 7x b & P5; 6x between P5 & P6; and 5x								
	12	37.7	PLU2576 12x Downstream of trench	h to DSW SDU; Refer Figure B.1.1.							
Concrete mattresses <sup>1</sup>	73	229.5	PLU2576JP1 through JP7 12x be DSW SDU & P2, 11x between DSV & P5; 12x between DSW SDU & P Refer Figure B.1.1.								
Odnorde matresses	47	202.8		<b>PLU2577</b> 12x between trench and DSW SDU and 35x between end of mattresses at WI drill centre and DSW WI1. Refer Figure B.1.1 and Figure B.2.1.							
	13	53.4	PLU2577JWI2 4x between DSW W PLU2577JWI3 4x between DSW W PLU2577JWI4 5x between DSW W	•							
	18	84.9	PL2581 10x PL599, PL598, Control 18x between end of trench to end of								
	7	38.9	PL4262 7x Dons pipeline crossings	. Refer Figure B.1.1.							



	Table 2.3.3: DSW Subsea Pipeline Stabilisation Features & Structures									
Stabilisation Feature	Tarial	Tatalana	Location(s)							
& Size (m)	Total Number	Total Mass (Te)		ecimal Minute Juoted)	Exposed/Buried/ Condition					
	17	80.2	<b>PL4262</b> 12x between DSW WI1 & WI3 via WI2; 6x be WI4; and 1x last end mattress at DSW WI4. Refer Fig.							
	400	10.0	PL2572 & PL2573 400x between DSW P5 & DSW P6	S.	Burial status will be determined when decommissioning activities are being carried out. Assumed exposed or inbetween concrete mattresses, resting on seabed.					
4	40	1.0	PLU2576JP1 40x between DSW SDU and DSW P1. I							
	40	1.0	PLU2576JP2 40x between DSW SDU and DSW P2. I	Refer Figure B.1.1.						
	80	2.0	PLU2576JP3 80x between DSW SDU and DSW P3. I							
	320	8.0	<b>PLU2576JP5</b> 320x between DSW SDU and DSW P5. B.1.1.	Burial status will be determined when						
Grout bags (25kg)	240	6.0	PLU2576JP6 80x between DSW SDU and DSW P6 a approach to DSW P6. Refer Figure B.1.1.							
	280	7.0	<b>PLU2576JP7</b> 320x between DSW SDU and DSW P5. B.1.1.	Refer Figure	decommissioning activities are being carried out. Assumed exposed at the installation or in-between concrete					
	40	1.0	PLU2577 40x between DSW SDU and DSW WI1. Ref	fer Figure B.2.1.	mattresses, resting on seabed.					
	40	1.0	PLU2577JWI2 40x between DSW SDU and DSW WI2 B.2.1.	2. Refer Figure						
	40	1.0	<b>PLU2577JWI3</b> 40x between DSW SDU and DSW WI3 B.2.1.	3. Refer Figure						
	40	1.0	PLU2577JWI4 40x between DSW SDU and DSW WI4 B.2.1.							
Grout bags (25kg) <sup>2</sup>	40	1.0	PL2581 40x between trench and end of pipeline. Refe	er Figure B.2.1.	Burial status will be determined when					



	Table 2.3.3: DSW Subsea Pipeline Stabilisation Features & Structures										
Stabilisation Feature	Takal	Tatalina	Locat								
& Size (m)	Total Number	Total Mass (Te)	WGS84 Decimal (If quoted):	WGS84 Decimal Minute (If quoted)	Exposed/Buried/ Condition						
	720	18.0	<b>PL4262</b> 720x between DSW WI1 & EB.2.1.	decommissioning activities are being carried out. Assumed exposed or inbetween concrete mattresses, resting on seabed.							
Grout bags (1Te) <sup>2</sup>	3	3.0	PLU2577JWI4 3x at DSW P3.	Burial status will be determined when decommissioning activities are being carried out. Assumed exposed, resting on seabed.							
	1	~41,000	PL2572, PL2573 & PLU2576 betwee long). Refer Figure 1.7.2 and Figure		Exposed.						
Deposited rock 1		~25,090	PL4262 downstream of riser base str safety zone between KP0.12 and KP Figure 1.7.2 and Figure B.1.1	Exposed.							
	1	~915	PL4262 at Don pipeline crossings be ~0.1km long). Refer Figure 1.7.2 and	Exposed.							

- 1. Concrete mattresses are 'SPS' type: 6m x 2m x 0.15m (Approx. Mass each mattress 3.14Te) or 6m x 3m x 0.15m (Approx. mass each mattress 4.72Te);
- 2. The quantity of 25kg and 1Te grout bags is estimated because the as-built data are not explicit.



### 2.3.3 Well Information

	Table 2.3.4: DSW	Well Information			
Well ID	Designation	Status	Category of Well		
211/18a-S2z	Oil production	Shut in	SS 3-1-1		
211/18a-S4	Water injection	Shut in	SS 1-1-1		
211/18a-S6	Water injection	Shut in	SS 1-1-1		
211/18a-S8z	Oil production	Shut in	SS 1-1-1		
211/18a-S9	Water injection	Shut in	SS 1-1-1		
211/18a-S10y	Oil production	Shut in	SS 1-1-1		
211/18a-S11	Oil production	Shut in	SS 1-1-1		
211/18a-S12z	Oil production	Shut in	SS 1-1-1		
211/18a-S13	Water injection	Shut in	SS 1-1-1		
211/18a-S14	Oil production	Shut in	SS 1-1-1		

For details of well categorisation please refer the latest version of the Oil and Gas UK Guidelines for the Decommissioning of wells. Well status is stated on the assumption that Northern Producer has departed.

### 2.3.4 Material Inventory Estimates

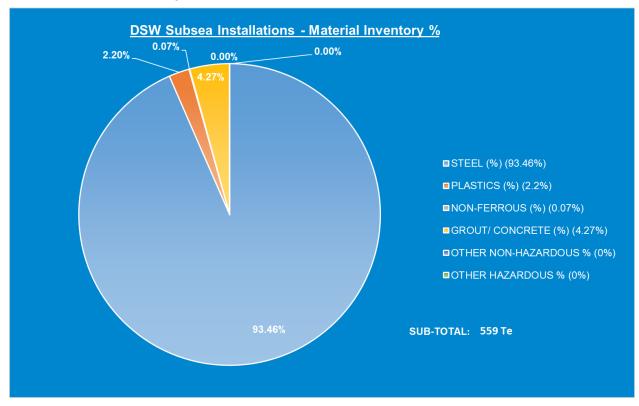


Figure 2.3.1: Pie-Chart of Material Inventory for DSW Installations



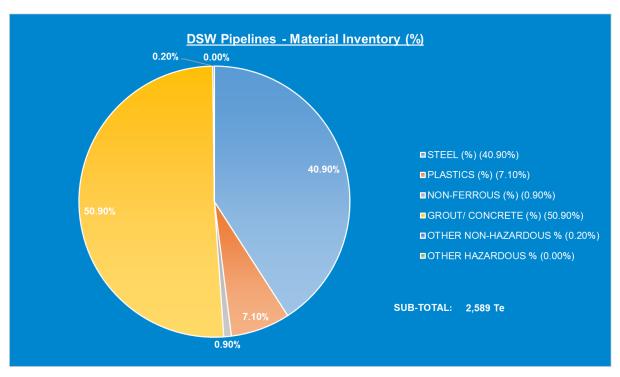


Figure 2.3.2: Pie-Chart of Material Inventory for DSW Pipelines

### 2.4 West Don Assets

## 2.4.1 Subsea Installations including Stabilisation Features

	Tab	le 2.4.1: WD Su	bsea Installation	Information	
Subsea			Loca	ation	
Installations Including Stabilisation Features	Number	Mass (Te) / Size (m)	WGS84 Decimal	WGS84 Decimal Minute	Comments/ Status
WD P1	1	55.9 8.8x9.2x6.7	61.495608° N 01.428825° E	61° 29.7365' N 01° 25.7295' E	
WD P2	1	55.9 8.8x9.2x6.7	61.495650° N 01.428355° E	61° 29.7390' N 01° 25.7013' E	
WD P3	1	55.9 8.8x9.2x6.7	61.495775° N 01.427853° E	61° 29.7465' N 01° 25.6712' E	
WD WI1	1	55.9 8.8x9.2x6.7	61.494333° N 01.429630° E	61° 29.6600' N 01° 25.7778' E	
WD WI2	1	55.9 8.8x9.2x6.7	61.494603° N 01.429872° E	61° 29.6762' N 01° 25.7923' E	
Concrete mattresses	n/a	n/a	n/a	n/a	n/a
Grout bags	n/a	n/a	n/a	n/a	n/a
Formwork	n/a	n/a	n/a	n/a	n/a
Deposited rock	n/a	n/a	n/a	n/a	n/a
Other	n/a	n/a	n/a	n/a	n/a



# 2.4.2 Pipelines including Stabilisation Features

				Table 2.4.	2: WD Pipeline/Flowline	e/Umbilical lı	nformation			
Description	Pipeline Number (as per PWA)	PWA Ident <sup>4</sup>	Diameter (NB) (inches) <sup>1</sup>	Length (m)	Description of Component Parts	Product Conveyed	From – To End Points <sup>2</sup>	Burial Status	Pipeline Status <sup>5</sup>	Current Content <sup>5</sup>
Water injection pipeline	, I DI 7287	RBS to WD pipeline flange	Trenched and buried in seabed except under deposited rock between KP1.175 and KP2.23	Out of use	Inhibited seawater					
		3	8"	27	Pipespools		Between pipeline end flange and each Xmas tree at WD WI1	Wet stored local to WD P1		
Oil pipeline PL2583	PL2583	1-17	8"/6"	141	Duplex & carbon steel pipespools		WD production tree P3 and pipeline flange	Surface laid, covered with concrete mattresses on approach to WI Xmas trees		
		18	8"	2,300	Pipeline	Oil	Pipeline flange on approach to WD P1 and RBS	Trenched and buried under deposited rock between KP0.05 and KP2.3	Out of use	Inhibited seawater
Gas injection pipeline	PL2584	5	3"	2,300	Carbon steel flowline		Pipeline flange downstream of RBS to Xmas tree at WD P1 well	Same trench as PL2583 buried under deposited rock		



				Table 2.4.	2: WD Pipeline/Flowline	e/Umbilical I	nformation			
Description	Pipeline Number (as per PWA)	PWA Ident <sup>4</sup>	Diameter (NB) (inches) <sup>1</sup>	Length (m)	Description of Component Parts	Product Conveyed	From – To End Points <sup>2</sup>	Burial Status	Pipeline Status <sup>5</sup>	Current Content <sup>5</sup>
Gas injection pipeline	PL2584	6-22	3"	145	Carbon steel pipespools		Between Xmas tree at WD P1 well through to Xmas tree at WD P3 well	Surface laid, covered with concrete mattresses		
Static umbilical	PLU2585	Cores 1-8	114.5mm	2,600	Static umbilical	Chemicals, methanol,	RBS SUTU to WD SUTU	In the same trench as PL2582	Out of use	Seawater
		WD JS1-8	114.5mm	10	Static umbilical jumpers	hydraulic fluids	Between WD SUTU and SDU	Exposed		
	PLU2585JP1	1-8	N/A	50		Chemicals,	WD SDU and WD P1		Out of use	Seawater
Umbilical jumper	PLU2585JP2	1-8	N/A	50	Umbilical jumpers	methanol, hydraulic	WD SDU and WD P2			
	PLU2585JP3	108	N/A	60		fluids	WD SDU and WD P3			
Umbilical	PLU2585JWI1	1-4	N/A	50	Limbiliaaliumnar	Hydraulic	WD SDU and WD WI1	Typood	Out of upo	Coguetor
jumper	PLU2585JWI2	1-4	N/A	90	Umbilical jumper	fluids	WD SDU and WD WI2	Exposed	Out of use	Seawater
Water injection pipeline	PL4261	2	228.1mm	2,842	Flexible pipeline	Seawater	RBS to WD WI2	Surface laid and buried under deposited rock between KP0.467 and KP2.348	Out of use	Seawater



	Table 2.4.2: WD Pipeline/Flowline/Umbilical Information											
Description	Pipeline Number (as per PWA)	PWA Ident <sup>4</sup>	Diameter (NB) (inches) <sup>1</sup>	Length (m)	Description of Component Parts	Product Conveyed	From – To End Points <sup>2</sup>	Burial Status	Pipeline Status <sup>5</sup>	Current Content <sup>5</sup>		
Water injection pipeline	PL4261	3-7	8"	81	Pipespools		Between pipeline end flange and each Xmas tree at DSW water injection wells	Surface laid, covered with concrete mattresses on approach to WI trees	Out of use	Seawater		

- 1. If diameter is expressed in mm it refers to outside diameter of umbilical;
- 2. For brevity, the description of the end-to-end points may differ slightly from those consented;
- 3. PL2582 Idents 1, PL2583 Idents 19-21, PLU2584 Idents 1-4, PLU2585 WD JR1-8, PL4261 Ident 1 are to be removed as part of Phase 1 of the decommissioning works and are therefore not listed here;
- 4. PWA Idents highlighted in green for the parts of pipelines affected by proposals Decommissioning Programmes that address Phase 1. Decommissioning of the remaining sections of pipelines are addressed by proposals herein;
- 5. Pipeline status and current content assume that the Northern Producer has departed with the pipeline and umbilicals dealt with accordingly.

Table 2.4.3: WD Subsea Pipeline Stabilisation Features & Structures									
	Total	Total Manage	Loca						
Stabilisation Feature	Total Number	Total Mass (Te)	WGS84 Decimal (If quoted):	WGS84 Decimal Minute (If quoted)	Exposed/Buried/Condition				
WD SDU & Protection Structure (8.5x5.2x3.5)	1	45.5	61.494338° N	61° 29.6603' N					
WD SDU & Protection Structure piles (4x)	1	34.2	01.428975° E Refer Figure B.3.1.	01° 25.7385' E Refer Figure B.3.1.	Stabilised and secured using a total of 4x piles. Exposed.				



	Tab	le 2.4.3: WD S	Subsea Pipeline Stabilisation F	eatures & Structures				
		Total Mass (Te)	Loca	Location(s)				
Stabilisation Feature	Total Number		WGS84 Decimal (If quoted):	WGS84 Decimal Minute (If quoted)	Exposed/Buried/Condition			
	46	157.2	PL2583 30x on final approach P2, 8x between WD P2 & P3. F	to WD P1; 8x between WD P1 & Refer Figure B.3.1.				
	24	75.5	PLU2585 24x on final approach	to WD SDU. Refer Figure B.3.1.	Burial status will be determined			
Concrete mattresses <sup>1</sup>	2	6.3	PLU2585JP1 2x between SDU	& WD P1. Refer Figure B.3.1.	when decommissioning activities are being carried out. Assumed			
	5	15.7	PLU2585JP2 5x between SDU	& WD P2. Refer Figure B.3.1.	exposed, resting on seabed.			
	9	29.9	PLU2585JP3 9x between SDU					
	4	12.6	PLU2585JW1 4x between SDL	J & WD P1. Refer Figure B.3.1.	Burial status will be determined			
Concrete mattresses <sup>1</sup>	13	40.9	PLU2585JW2 13x between SD	when decommissioning activities are being carried out. Assumed				
	32	128.9	PL4261 32x on final approach	exposed, resting on seabed.				
	40	1.0	PLU2585JP1 40x between SD	U & WD P1. Refer Figure B.3.1.				
	40	1.0	PLU2585JP2 40x between SD	U & WD P2. Refer Figure B.3.1.	Burial status will be determined			
	40	1.0	PLU2585JP3 40x between SD	U & WD P3. Refer Figure B.3.1.	when decommissioning activities			
Grout bags (25kg) <sup>2</sup>	40	1.0	PLU2585JW1 40x between SD	OU & WD P1. Refer Figure B.3.1.	are being carried out. Assumed largely exposed at the installation			
	40	1.0	PLU2585JW2 40x between SD	OU & WD P1. Refer Figure B.3.1.	or in-between concrete mattresses, resting on seabed.			
	1,115	33.4	<b>PL4261</b> x on final approach to & WI2. Refer Figure B.3.1	WD WI1 and between WD WI1	mattlesses, resting on seabed.			
Deposited rock <sup>3</sup>	1	~3,800	PL2582 & PLU2585 between klong). Refer Figure 1.7.2 and F	KP1.75 and KP2.23 (i.e. ~4.8km igure B.3.1.	Exposed.			
Deposited rock <sup>3</sup>	1	~22,000	PL2583 & PL2584 downstream former NP 500m safety zone be ~2.25km long). Refer Figure 1.	etween KP0.05 and KP2.3 (i.e.	Exposed.			



Table 2.4.3: WD Subsea Pipeline Stabilisation Features & Structures									
	T-1-1	Total Mass (Te)	Locat						
Stabilisation Feature	Total Number		WGS84 Decimal (If quoted):	WGS84 Decimal Minute (If quoted)	Exposed/Buried/Condition				
Deposited rock	1		PL4261 downstream of riser ba 500m safety zone between KP0 ~1.88km long). Refer Figure 1.7	Exposed.					

- 1. Concrete mattresses are 'SPS' type: 6m x 2m x 0.15m (Approx. mass each mattress 3.14Te) or 6m x 3m x 0.15m (Approx. mass each mattress 4.72Te);
- 2. The quantity of 25kg and 1Te grout bags is estimated or based on original deposit consent because the as-built data are not explicit;
- 3. The quantity of deposited rock is estimated or based on the original deposit consent.



### 2.4.3 Well Information

Table 2.4.4: WD Well Information					
Well ID	Designation	Status	Category of Well		
211/18a-W1	Oil production	Shut in	SS 3-1-1		
211/18a-W3z	Water injection	Shut in	SS 1-1-1		
211/18a-W4	Oil production	Shut in	SS 3-1-1		
211/18a-W5	Oil production	Shut in	SS 1-1-1		
211/18a-W6	Water injection	Shut in	SS 1-1-1		

For details of well categorisation please refer the latest version of the Oil and Gas UK Guidelines for the Decommissioning of wells. Well status is stated on the assumption that Northern Producer has departed.

### 2.4.4 Material Inventory Estimates

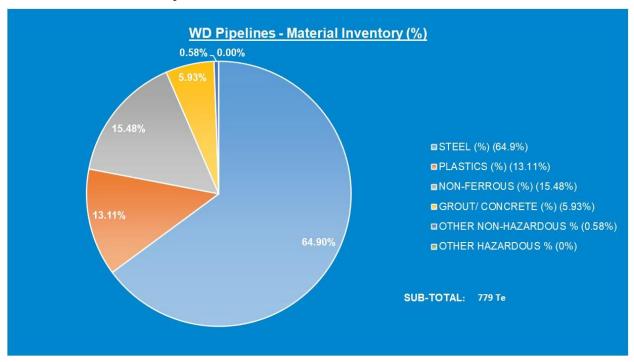


Figure 2.4.1: Pie-Chart of Material Inventory for WD Installations



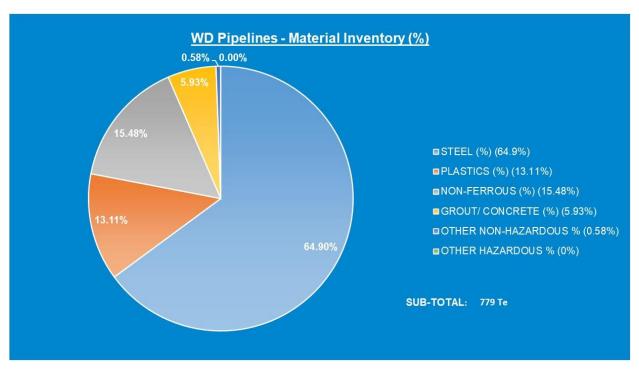


Figure 2.4.2: Pie-Chart of Material Inventory for WD Pipelines

### 2.5 Ythan Assets

### 2.5.1 Subsea Installations including Stabilisation Features

	Table 2.5.1: Ythan Subsea Installation Information						
Subsea			Loca	ation			
Installations Including Stabilisation Features	Number	Mass (Te) / Size (m)	WGS84 Decimal	WGS84 Decimal Minute	Comments/ Status		
Ythan WHPS	1	55.9 8.8m x 9.2m x 6.7m	61.468145° N 01.533597° E	61° 28.0887' N 01° 32.0158' E			
Concrete mattresses	n/a	n/a	n/a	n/a	n/a		
Grout bags	n/a	n/a	n/a	n/a	n/a		
Formwork	n/a	n/a	n/a	n/a	n/a		
Deposited rock	n/a	n/a	n/a	n/a	n/a		
Other	n/a	n/a	n/a	n/a	n/a		



# 2.5.2 Pipelines including Stabilisation Features

	Table 2.5.2: Ythan Pipeline/Flowline/Umbilical Information								
Pipeline Number (as per PWA)	PWA Ident	Diameter (NB) (inches) <sup>1</sup>	Length (m)	Description of Component Parts	Product Conveyed	From – To End Points <sup>2</sup>	Burial Status	Pipeline Status <sup>3</sup>	Current Content <sup>3</sup>
PL3749	1-4	8"	38.8	Pipespool, duplex	Oil	Ythan Well P1 to DSW Well P7. Figure B.1.1.		Out of use	Seawater
PL3751	1-4	3"	46.8	Pipespool, carbon steel	Gas	DSW Well P7 to Ythan Well P1. Figure B.1.1.		Out of use	Seawater
PLU3752	1-2	N/A	165 (115+50)	Electrical umbilical	Power & Signals	DSW SDU to DSW P7 ESDU to Ythan Well P1. Figure B.1.1.	Surface laid, protected by concrete	Out of use	Seawater
PLU3753	1	41mm	165	Chemical umbilical	Scale inhibitor	DSW SDU to DSW ESDU at DSW Well P7. Figure B.1.1.	mattresses	Out of use	Seawater
PLU3754	1	129mm	50	Umbilical jumper	Chemicals & hydraulic fluids	DSW P7 Extension SDU to Ythan Well P1. Figure B.1.1.		Out of use	Seawater

# NOTES

- 1. If diameter is expressed in mm it refers to outside diameter of umbilical;
- 2. For brevity, the description of the end-to-end points may differ slightly from those consented;
- 3. Pipeline status and current content assume that the Northern Producer has departed with the pipeline and umbilicals dealt with accordingly.



	Table 2.5.3: Ythan Pipeline Stabilisation Features & Structures						
			Locat				
Stabilisation Feature	Total Number	Total Mass (Te)	WGS84 Decimal (If quoted):	WGS84 Decimal Minute (If quoted)	Exposed/Buried/Condition		
	6	18.9	PL3749 6x between DSW P7 & Yth	nan Well P1. Refer Figure B.1.1.			
Concrete mattresses <sup>1</sup>	18						
	6	18.9	PLU3754 6x between DSW Well PB.1.1	exposed, resting on seabed.			
	480	12.0	<b>PL3749</b> 480x between DSW P7 & `	Ythan Well P1. Refer Figure B.1.1.	Burial status will be determined		
Grout bags <sup>2</sup>	560	14.0	PLU3753 280x between DSW SDU and DSW ESDU at Well P7; 280x between ESDU at DSW Well P7 and Ythan Well P1. Refer Figure B.1.1.		when decommissioning activities are being carried out. Assumed largely exposed at the installation or in-between concrete mattresses, resting on seabed.		
	560	14.0	PLU3754 560v between DSW Well P7 and Vthan Well P1. Refer				

- 1. Concrete mattresses are 'SPS' type: 6m x 2m x 0.15m (Approx. mass each mattress 3.14Te) or 6m x 3m x 0.15m (Approx. mass each mattress 4.72Te);
- 2. The quantity of 25kg and 1Te grout bags is estimated or based on original Deposit Consents because the as-built data are not explicit.



#### 2.5.3 Well Information

Table 2.5.4: Ythan Well Information				
Well ID	Designation	Status	Category of Well	
211/18a-S15	Oil production	Shut in	SS 1-1-1	

For details of well categorisation please refer the latest version of the Oil and Gas UK Guidelines for the Decommissioning of wells. Well status is stated on the assumption that Northern Producer has departed.

### 2.5.4 Material Inventory Estimates

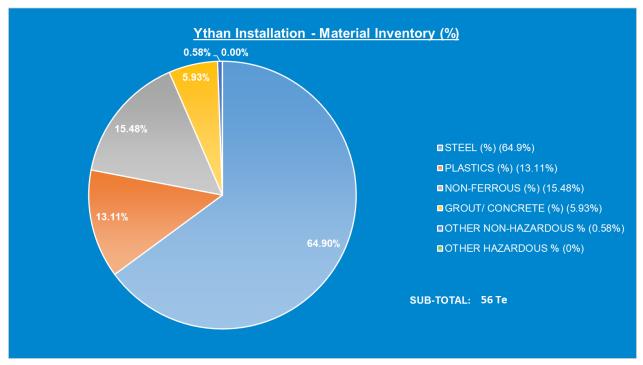


Figure 2.5.1: Pie-Chart of Material Inventory for Ythan Installation

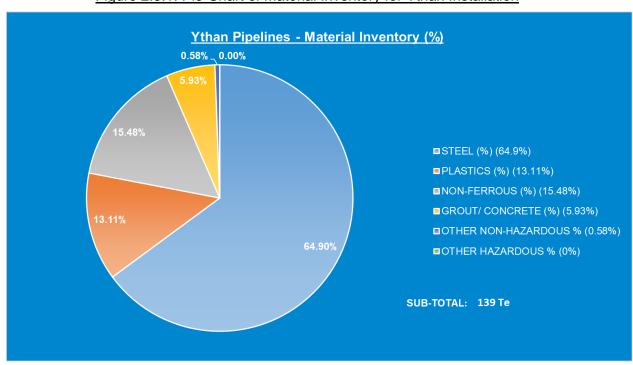


Figure 2.5.2: Pie-Chart of Material Inventory for Ythan Pipelines

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#### 3. REMOVAL AND DISPOSAL METHODS

Waste will be dealt with in accordance with the Waste Framework Directive. The re-use of an installation, pipeline, or umbilical pipeline or parts thereof, is first in the order of preferred decommissioning options and such options are currently under investigation. Waste generated during decommissioning will be segregated by type and periodically transported to shore in an auditable manner through licensed waste contractors. Steel and other recyclable metals are estimated to account for the greatest proportion of the materials inventory.

Geographic locations of potential disposal yard options may require the consideration of Trans Frontier Shipment of Waste (TFSW), including hazardous materials. Early engagement with the relevant waste regulatory authorities will ensure that any issues with TFSW are addressed.

In order to explore synergistic opportunities and efficiencies in operational activity and cost, it's possible that the pipelines around the Wye structure (PL2578 & PL2579) will be dealt with at the same time as Wye structure and Thistle pipelines PL4555 & PL4556 and within the Thistle 500m safety zone, PL2579, PLU2580, PLU25480JSO and PLU2580JSG will be decommissioned at the same time as the Thistle infrastructure.

#### 3.1 Installations - Subsea Facilities & Stabilisation Features

Table 3.1.1: Subsea Installations & Stabilisation Features					
Subsea installations and stabilisation features	Number	Option	Disposal Route (if applicable)		
Conrie installation	1	Complete recovery.	Return to shore for reuse or recycling.		
DSW installations	10	Complete recovery.	Return to shore for reuse or recycling.		
WD installations	5	Complete recovery.	Return to shore for reuse or recycling.		
Ythan installation	1	Complete recovery.	Return to shore for reuse or recycling.		

### 3.2 Pipelines

There is an implicit assumption that options for re-use of the pipelines have been exhausted prior to the facilities and infrastructure moving into the decommissioning phase and associated comparative assessment; therefore, this option has been excluded. The three decommissioning options considered are:

- **Complete removal** This would involve the complete removal of the pipelines by whatever means would be most practicable and acceptable from a technical perspective;
- Partial removal or remediation This would involve removing exposed or potentially unstable sections of pipelines. Remedial work may need to be carried out to make the remaining pipeline safe for leaving *in situ*. This option is relevant for those pipelines that have known exposures because of poor depth of cover. There will likely be a need to verify their status via future surveys;
- Leave *in situ* This would involve leaving the pipeline(s) *in situ* with no remedial works but possibly verifying their status via future surveys.

All surface laid equipment including pipelines that have not been trenched or buried will be completely recovered from the seabed up to the point where they are buried and taken to shore for re-use or recycling or final disposal. Table 3.2.2 summarises the lengths of pipelines and pipespools being removed, thereby removing potential snagging hazards.

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The decommissioning options summarised herein are supported by a comparative assessment where each decommissioning option was comparatively assessed against Technical feasibility and efficacy, Safety concerns, Environmental and Societal impact and Cost [2]. For the purposes of the assessment the pipelines were considered as one of three pipeline groups as summarised in Table 3.2.1:

	Table 3.2.1: Pipeline Decommissioning Options and Grouping					
Asset	Pipeline ID	Complete removal	Partial removal	Leave <i>in situ</i>	Group	Comments
DSW & WD	PL2578 & PL2579	Х		Χ	1	Reasonable depth of cover, no exposures
DSW	PL2572 & PL2573	Х		Χ	1	Good depth of cover, no exposures
DSW	PLU2576	Х	Х	Χ	3	Poor cover, numerous exposures; partial removal or remedial works considered
DSW	PLU2577 & PL2581	Х	Х	Х	3	Poor cover, numerous exposures; partial removal or remedial works considered
DSW	PL4262	Χ		Χ	2	Good depth of cover, no exposures
WD	PL2582, PLU2585	Х	Х	Х	3	Poor cover, numerous exposures; partial removal or remedial works considered
WD	PL2583 & PL2584	Χ		Χ	1	Good depth of cover, no exposures
WD	PL4261	X		Χ	2	Good depth of cover, no exposures

#### NOTE:

- 1. The pipelines listed here excludes those pipelines that were wholly surface laid and covered with concrete mattresses:
- 2. PLU2577 and PL2581 were trenched into the seabed, deposited rock used to bury all the other pipelines;
- 3. PL2582 was trenched in the seabed but emerges at the Don pipeline crossings where it is buried under deposited rock.

Decommissioning of the pipeline infrastructure during Phase 1 is addressed in separate Decommissioning Programmes [1].

### 3.2.1 DSW & WD pipelines - outcome of the Comparative Assessment

Table	Table 3.2.2: DSW & WD Pipeline Decommissioning Proposals				
Pipeline or Group	Recommended Option	Justification			
PL2578	Leave most of the pipelines in situ.	This results in minimal			
PL2579	Remove surface laid sections including those currently protected and stabilised with concrete mattresses, but otherwise leave <i>in situ</i> .	disturbance to the seabed, lower energy use, reduced risk to personnel, and lower			
	Removal of surface laid sections of both PL2578 & PL2579 near the Wye Structure (total ~100m each pipeline).	cost.  Once decommissioned, the remaining sections of the pipelines can be expected to			
	For PL2579 at Thistle 'A' this involves removal of ~400m on approach to Thistle.	remain buried and stable throughout their length.			



Table 3.2.2: DSW & WD Pipeline Decommissioning Proposals				
Pipeline or Group	Recommended Option	Justification		
PLU2580	Completely remove.	Leaves a clear seabed free of potential snagging hazards. Avoids need for future		
PLU2580JSO		monitoring activities.		
PLU2580JSG				

- 1. The decommissioning of the pipeline ends at or near the original NP 500m safety zone is addressed in the Decommissioning Programmes for Phase 1 the departure of the Northern Producer FPF [1];
- 2. Note that the protection and stabilisation features associated with PL2579 as it by-passes the Wye Structure also protect and stabilise PL4555 which belongs to the Thistle owners. These features will likely be left *in situ* until PL4555 (formerly PL2578) between Thistle 'A' and the Wye Structure is decommissioned as part of the Thistle 'A' pipeline infrastructure;
- 3. Where buried in deposited rock, remedial work may be required to bury the end of the pipeline where it protrudes out from the rock. As a contingency measure, small deposits of rock may need to be added to the existing rock to make sure that the pipeline ends remain buried.
- 4. In order to explore synergistic opportunities PLU2580 (which incorporates PLU2580JSO and PLU2580JSG) and associated infrastructure such as riser bases (PLU2580 & PL2579), SSIV skids and pipelines within the Thistle 'A' 500m safety zone will likely be decommissioned at the same time as the Thistle 'A' installation and infrastructure.

### 3.2.2 Conrie pipelines - outcome of the Comparative Assessment

Table 3.2.3: Conrie Pipeline Decommissioning Proposals				
Pipeline or Group	Recommended Option	Justification		
PL2572 (5-8)	Completely remove.	Leaves a clear seabed free of potential		
PL2573 (18-21)		snagging hazards. Avoids need for future monitoring activities.		
PLU2576JP4		3		

#### **NOTES:**

1. The Conrie pipelines are not affected by the proposals for Phase 1 of the decommissioning works, described in [1].

### 3.2.3 DSW pipelines - outcome of the Comparative Assessment

Table 3.2.4: Pipeline Decommissioning Proposals				
Pipeline or Group	Recommended Option	Justification		
PL2572 except (5-8)	Leave most of the pipelines in situ.  Remove surface laid sections including those currently protected and stabilised with concrete mattresses or connected to the DSW	This results in minimal disturbance to the seabed, lower energy use, reduced risk to personnel, and lower cost.  Once decommissioned, the remaining sections of the pipelines can be		



	Table 3.2.4: Pipeline Decommission	ing Proposals
Pipeline or Group	Recommended Option	Justification
PL2573 except (18-21)	production wells (total length to be removed ~100m each), but otherwise leave <i>in situ</i> .	expected to remain buried and stable throughout their lengths.
PLU2576	Leave most of the pipelines <i>in situ</i> .  Remove surface laid sections including those currently protected and stabilised with concrete mattresses and connected to the DSW SDU (total length ~100m), but otherwise leave <i>in situ</i> .	This results in minimal disturbance to the seabed, lower energy use, reduced risk to personnel, and lower cost.  Albeit with poor depth of cover and some exposures, once decommissioned, the remaining section of pipeline is expected to remain mostly buried and stable throughout its length.
PLU2576JP1 to JP7	Completely remove.	Leaves a clear seabed free of potential snagging hazards. Avoids need for future monitoring activities.
PLU2577	Leave most of the pipelines <i>in situ</i> .  Remove surface laid sections including those currently protected and stabilised with concrete mattresses and connected to the DSW WI wells (total length~200m) and remove part of the buried section up to KP0.070 to remove the anomalous section ~11m long in the trench, but otherwise leave <i>in situ</i> .	This results in minimal disturbance to the seabed, lower energy use, reduced risk to personnel, and lower cost.  Albeit with poor depth of cover and some exposures, once decommissioned, the remaining section of pipeline is expected to remain mostly buried and stable throughout its length.
PLU2577JWI2 to JWI4	Completely remove.	Leaves a clear seabed free of potential snagging hazards. Avoids need for future monitoring activities.
PL2581	Leave most of the pipelines <i>in situ</i> . Remove wet stored pipespools (total length ~27m) as well as surface laid sections including those currently protected and stabilised with concrete mattresses, but otherwise leave <i>in situ</i> .	This results in minimal disturbance to the seabed, lower energy use, reduced risk to personnel, and lower cost.  Albeit with poor depth of cover and some exposures, once decommissioned, the remaining section of pipeline is expected to remain mostly buried and stable throughout its length.
PL4262	Leave most of the pipelines <i>in situ</i> .  Remove surface laid sections including those currently protected and stabilised with concrete mattresses and connected to the DSW WI wells (total length ~200m), but otherwise leave <i>in situ</i> .	This results in minimal disturbance to the seabed, lower energy use, reduced risk to personnel, and lower cost.  Once decommissioned, the remaining section of pipeline can be expected to remain buried and stable throughout its length.
PL4557	Completely remove.	This short section is connected to the SALB. This will also be recovered.
NOTE:		



Table 3.2.4: Pipeline Decommissioning Proposals			
Pipeline or Group	Recommended Option	Justification	

- 1. Where buried in the seabed local excavations will be required to locate the pipeline cut point. Following severance of the pipeline the excavation will be mechanically backfilled;
- 2. Where buried in deposited rock, remedial work may be required to bury the end of the pipeline where it protrudes out from the rock. As a contingency measure, small deposits of rock may need to be added to the existing rock to make sure that the pipeline ends remain buried.

# 3.2.4 WD pipelines - outcome of the Comparative Assessment

	Table 3.2.5: WD Pipeline Decommissioning Proposals				
Pipeline or Group	Recommended Option	Justification			
PL2582	Leave most of the pipelines <i>in situ</i> .  Remove wet stored pipespools (total length ~50m) surface laid sections including those currently protected and stabilised with concrete mattresses, but otherwise leave <i>in situ</i> .	This results in minimal disturbance to the seabed, lower energy use, reduced risk to personnel, and lower cost.  Albeit with poor depth of cover and some exposures, once decommissioned, the remaining section of pipeline is expected to remain mostly buried and stable throughout its length.			
PL2583	Leave most of the pipelines in situ.	This results in minimal disturbance to			
	Remove surface laid sections including those currently protected and	the seabed, lower energy use, reduced risk to personnel, and lower cost.			
PL2584	stabilised with concrete mattresses and connected to the WD production wells (total length ~160m for each pipeline), but otherwise leave <i>in situ</i> .	Once decommissioned, the remaining sections of pipeline can be expected to remain buried and stable throughout their length.			
PLU2585	Leave most of the pipelines <i>in situ</i> .  Remove surface laid sections including those currently protected and stabilised with concrete mattresses and connected to the WD SDU total length ~175m), but otherwise leave <i>in situ</i> .	This results in minimal disturbance to the seabed, lower energy use, reduced risk to personnel, and lower cost.  Albeit with poor depth of cover and some exposures, once decommissioned, the remaining section of pipeline is expected to remain mostly buried and stable throughout its length.			
PLU2585 JP1 to 'JP3	Completely remove.	Leaves a clear seabed free of potential snagging hazards. Avoids need for future monitoring activities.			
PLU2585JW1 to 'JW2	Completely remove.	Leaves a clear seabed free of potential snagging hazards. Avoids need for future monitoring activities.			
PL4261	Leave most of the pipelines <i>in situ</i> .  Remove surface laid sections including those currently protected and stabilised with concrete mattresses and connected to the WD WI wells (total length ~120m), but otherwise leave <i>in situ</i> .	This results in minimal disturbance to the seabed, lower energy use, reduced risk to personnel, and lower cost.  Once decommissioned, the remaining section of pipeline can be expected to remain buried and stable throughout its length.			
NOTES:					



Table 3.2.5: WD Pipeline Decommissioning Proposals			
Pipeline or Group	Recommended Option	Justification	

- Where buried in the seabed local excavations will be required to locate the pipeline cut point. Following severance of the pipeline the excavation will be mechanically backfilled;
- 2. Where buried in deposited rock, remedial work may be required to bury the end of the pipeline where it protrudes out from the rock. As a contingency measure, small deposits of rock may need to be added to the existing rock to make sure that the pipeline ends remain buried.

### 3.2.1 Ythan pipelines - outcome of the Comparative Assessment

Table 3.2.6: Pipeline Decommissioning Proposals				
Pipeline or Group Recommended Option		Justification		
PL3749		Leaves a clear seabed free of potential snagging hazards. Avoids need for future monitoring activities.		
PL3751				
PLU3752	Completely remove.			
PLU3753				
PLU3754				

## 3.3 Pipeline Stabilisation Features

All pipeline related structures, concrete mattresses and grout bags will be recovered to shore, except for those associated with the Don pipeline crossings.

### 3.3.1 DSW & WD pipeline stabilisation features & structures

Table 3.3.1: DSW & WD Pipeline Stabilisation Features & Structures				
Asset	Number	Description	Disposal Route (if applicable)	
Concrete mattresses	46	Refer Table 2.1.3, Figure B.4.1 and	Aim to recover all exposed concrete mattresses to shore for re-use, recycling, or disposal.	
Grout bags	1,280	for recycling & disposal ~80% are recovered for	Aim to recover all grout bags to shore for recycling & disposal but assume ~80% are recovered for the purposes of estimating as some may be buried.	
Deposited rock	2		Leave in situ.	
Thistle 3" SSIV & Protection Structure (6m x 3.5m x 3.0m) 1	1		Recover structure to shore for reuse, recycling, or disposal.	
8" oil export and umbilical riser base and protection structure, (6.1m x 2.8m x 0.5m) 1	1		Recover structure to shore for reuse, recycling, or disposal.	
3" gas import riser base and protection structure, (3.8m x 2.8m x 0.5m) 1	1		Recover structure to shore for reuse, recycling, or disposal.	
NOTE:				

1. Please refer notes 2 & 3 in Table 3.2.2.



## 3.3.2 Conrie pipeline stabilisation features

Table 3.3.2: Conrie Pipeline Stabilisation Features				
Asset	Number	Description	Disposal Route (if applicable)	
Concrete mattresses	28	Defer Table 2.2.2	Aim to recover all exposed concrete mattresses to shore for re-use, recycling, or disposal.	
Grout bags	80	Refer Table 2.2.3, Figure B.1.1.	Aim to recover all grout bags to shore for recycling & disposal but assume ~80% are recovered for the purposes of estimating as some may be buried.	

### 3.3.3 DSW pipeline stabilisation features & structures

Table 3.3.3: DSW Pipeline Stabilisation Features & Structures					
Asset	Number	Description	Disposal Route (if applicable)		
DSW SDU & protection structure <sup>2</sup> .	1	DSW SDU & Protection Structure (8.5x5.2x3.5) stabilised and secured using a total of 4 piles.	Recover structure to shore for re-use, recycling, or disposal.		
Concrete mattresses	256		Aim to recover all exposed concrete mattresses to shore for re-use, recycling, or disposal. Leave the concrete mattresses buried under deposited rock at the Don pipeline crossings in situ.		
Grout bags (25kg)	2,320	Refer Table 2.3.2, Figure 1.7.2 and Figure B.1.1.	Aim to recover all grout bags to shore for recycling & disposal but assume ~80% are recovered for the purposes of estimating as some may be buried.		
Grout bags (1Te)	3		Aim to recover all grout bags		
Deposited rock	3		Leave in situ.		

### **NOTES:**

- 1. Please refer notes 2 & 3 in Table 2.3.3;
- 2. Assuming there would be no technical issues, the piles will be internally cut 1.0m below the seabed as the seabed is stable in this area. Should any difficulties be encountered in accessing the piles internally such that an excavation will be required, OPRED will be consulted before the piles are cut.



## 3.3.4 WD Pipeline stabilisation features & structures

Table 3.3.4: WD Pipeline Stabilisation Features & Structures					
Asset	Number	Description	Disposal Route (if applicable)		
WD SDU & protection structure <sup>2</sup> .	1	WD SDU & Protection Structure (8.5x5.2x3.5) stabilised and secured using a total of 4 piles.	Recover structure to shore for re-use, recycling, or disposal.		
Concrete mattresses	256	D.C. T.H. 000	Aim to recover all exposed concrete mattresses to shore for re-use, recycling, or disposal. Leave the concrete mattresses buried under deposited rock at the Don pipeline crossings in situ.		
Grout bags (25kg)	out bags (25kg)  2,320  Refer Table 2.3.2, Figure 1.7.2 and Figure B.3.1.		Aim to recover all grout bags to shore for recycling & disposal but assume ~80% are recovered basis of diminishing returns for the amount of effort required.		
Grout bags (1Te)	3		Aim to recover all grout bags		
Deposited rock	3		Leave in situ.		

### NOTES:

- 1. Please refer notes 2 & 3 in Table 2.3.3;
- 2. Assuming there would be no technical issues, the piles will be internally cut 1.0m below the seabed as the seabed is stable in this area. Should any difficulties be encountered in accessing the piles internally such that an excavation will be required, OPRED will be consulted before the piles are cut.

### 3.3.5 Ythan pipeline stabilisation features

Table 3.3.5: Ythan Pipeline Stabilisation Features & Structures				
Asset	Asset Number Description Disposal Route (if applicable)			
Concrete mattresses	30	Defer Table 2.5.2	Aim to recover all exposed concrete mattresses to shore for re-use, recycling, or disposal.	
Grout bags	1680	Refer Table 2.5.3, Figure B.1.1.	Aim to recover all grout bags to shore for recycling & disposal but assume ~80% are recovered basis of diminishing returns for the amount of effort required.	



### 3.4 Wells

### **Table 3.4.1: Well Decommissioning**

The Conrie, Don South-West, West Don and Ythan inventory consists of a total of 17 wells: Conrie (211/18a-S7); Don South-West (211/18a-S2z, 211/18a-S4, 211/18a-S6, 211/18a-S8z, 211/18a-S9, 211/18a-S10y, 211/18a-S11, 211/18a-S12z, 211/18a-S13, 211/18a-S14); (West Don) 211/18a-W1, 211/18a-W3z, 211/18a-W4, 211/18a-W5, 211/18a-W6; and Ythan (211/18a-S15).

The wells listed in Section 2.2.3 (Table 2.2.4), Section 2.3.3 (Table 2.3.4), Section 2.4.3 (Table 2.4.4), and Section 2.5.3 (Table 2.5.4) will be decommissioned in accordance with latest version of the Oil & Gas UK Well Decommissioning Guidelines. A Master Application Template (MAT) and the supporting Subsidiary Application Template (SAT) will be submitted in support of works carried out. An application to decommission the wells will be made via the online Well Operations Notification System (WONS) on the OGA Energy Portal. Well decommissioning is currently scheduled to commence earliest in 2026 although should any integrity concerns arise meantime, they will be addressed sooner as per the Gantt Chart in Figure 6.3.1. EnQuest has prepared a well integrity risk assessment and will address any mitigations required.

### 3.5 Waste Stream Management Methods

	Table 3.5.1: Waste Stream Management Methods			
Waste Stream	Removal and disposal method			
Bulk liquids	As part of Phase 1 of the decommissioning operations, bulk hydrocarbons will have been exported with any residual hydrocarbons removed from the FPF in accordance with contractual agreements with the vessel owner. Any associated bulk seawater from topsides will have been cleaned and disposed overboard under permit. The production risers, pipelines and water injection flowlines will have been flushed and left filled with seawater as appropriate prior to being disconnected. Further cleaning and decontamination of materials recovered to shore will take place onshore prior to recycling / re-use or disposal.			
Marine growth	Where necessary and practicable to allow access, some marine growth will be removed offshore. The remainder will be brought to shore and disposed of according to guidelines and company policies.			
NORM	Based on production records to date, NORM is expected. Tests for NORM will be undertaken offshore and any NORM encountered will be dealt with and disposed of in accordance with guidelines and company policies.			
Asbestos	It unlikely that asbestos will be present in the pipeline infrastructure and structures that are being recovered to shore. However, should any such material found will be dealt with and disposed of in accordance with guidelines and company policies.			
Other hazardous wastes	Will be recovered to shore and disposed of according to guidelines and company policies and will also take place under appropriate permits.			
Onshore Dismantling sites	Appropriately licensed sites will be selected for dealing with materials recovered to shore. The dismantling site must demonstrate proven disposal track record and waste stream management throughout the deconstruction process and demonstrate their ability to deliver re-use and recycling options.			



Table 3.5.2: Inventory Disposition				
Inventory	Total inventory (Te)	Phase 1 planned to shore (Te)	Phase 2 planned to shore (Te)	Left in situ (Te)
Installations				
Don South-West & West Don <sup>1</sup>	103	-	103	-
Conrie	56	-	56	-
Don South-West	663	-	663	-
West Don	280	-	280	-
Ythan	56	-	56	-
Pipelines & Stabilisation				
Don South-West & West Don	1,556	449	310	797
Conrie	69	-	69	-
Don South-West	2,589	114	1,356	1,119
West Don	783	49	216	518
Ythan	139	-	139	-
SUB-TOTAL (excl. rock)	6,295	612	3,179	2,504
Deposited Rock				
Don South-West & West Don	58,000	-	-	58,000
Conrie	-	-	-	-
Don South-West	72,705	-	-	72,705
West Don	35,159	-	-	35,159
Ythan	-	-	-	-
TOTAL DEPOSITED ROCK	165,864	-	-	165,864

<sup>1.</sup> The inventory associated with the Northern Producer is dealt with in the Decommissioning Programmes for Phase 1 [1] and is excluded here.

Table 3.5.3: Re-use, Recycle & Disposal Aspirations for Recovered Material						
Inventory	Inventory Re-use Recycle Disposal (e.g. Landfill)					
Installations	<5%	>95%	<5%			
Pipelines & structures	<5%	>95%	<5%			

All recovered material will be transported onshore for re-use, recycling, or disposal. The expectation is that any synthetic materials associated with the pipelines will be shredded and recycled. It is not possible to predict the market for re-usable materials with any confidence so the figures in Table 3.5.3 are aspirational.



### 4. ENVIRONMENTAL APPRAISAL

#### 4.1 Environmental Sensitivities

The environmental characteristics and sensitivities are such that the seabed area is stable with relatively homogenous community. It is typical of sandy sediments, generally diverse and evenly distributed community with low taxonomic dominance.

Generally uniform and background hydrocarbon and metal concentrations typical of the northern North Sea, concentrations of hydrocarbons and metals were below recognised toxicity thresholds and were not found to have exerted any notable influence on the macrofaunal community structure.

The closest SAC or Annex 1 feature is the Pobie Bank Reef that is ~109km south-west of NP.

Impact from operations from the NP are not significant as there are no discharges from drilling, and seabed impacts from anchors can be considered minimal.

Commercial fishing activity in the area can be considered low.

The reference sources used for this assessment are as follows:

- Environmental Baseline Survey (Don SW and SW to Thistle) & Habitat Investigation (W. Dons) UKCS Block 211/18. May-July 2007;
- Fugro Pipeline Route Survey. Dons West. July 2010;
- Gardline Environmental Baseline & Habitat Assessment, East Dons Site Survey. UKCS 211/18 and 211/19. June 2012;
- Environmental Baseline & Habitat Assessment. Dunlin By-pass. July 2018;
- Using data taken from either an adjacent month or adjacent block, seabird sensitivity except for January, November or December of any given year, seabird vulnerability is considered low;
- Sand discharges have been minimal offshore;
- There is only one wreck located within Block 211/18 designated under the Protection of Military Remains Act 1986 'war graves'.
- There are no historical Marine Protected Areas in the vicinity of the Northern Producer FPF.



### 4.2 Potential Environmental Impacts and their Management

#### 4.2.1 Overview

The significance of any environmental impacts and risks (potential impacts) associated with each element of the project activities are described in Table 4.2.1.

### 4.2.2 Key control and mitigation measures

### **Table 4.2.1: Key Control and Mitigation Measures**

#### **Underwater Noise**

- A SIMOPS plan for vessel activity in the field will be put in place
- Vessel, cutting and trenching operations will use standard methods and equipment. No explosives used.

#### **Discharges to Sea**

- All contracted vessels will operate in line with IMO and MARPOL regulations
- Pipelines and spool are to be flushed, filled with seawater, and isolated prior to disconnection

All discharges will be permitted under applicable UK legislation.

### Accidental Events

- All contracted vessels will have a ship-board oil pollution emergency plan (SOPEP) in place
- A Collision Risk Management Plan will be developed and implemented
- Agreed arrangements in place with oil spill response organisation for mobilising resources in event of a spill
- Existing field OPEP in place to reduce the likelihood of hydrocarbon release and define spill response in place
- Lifting operations will be planned to manage the risk
- Recovery of any dropped objects will take place
- Vessel contactors will have procedures for fuel bunkering that meet EnQuest's standard
- Where practicable, re-fuelling will take place during daylight hours only.

#### **Physical Presence of Infrastructure & Vessels**

- All vessels will comply with standard marking conditions and consent to locate conditions
- If required, a specific SIMOPS plan for vessel activity in the field will be put in place, noting that a standard DSV SIMOPS Guideline already exists for the asset
- All seabed infrastructure will be fully protected on the seabed in the interim period between Phase 1 & 2
- If full seabed clearance of the FPF 500m zone is not completed, a guard vessel hired by EnQuest will remain on site
- Small quantities of rock may be required where exposed pipeline ends remain after severance at existing deposited rock:
- Seabed clearance certificate issued if an overtrawl survey is carried out, otherwise survey findings will be described
  in the close out report.

#### **Atmospheric Emissions & Energy Use**

- Time vessels spend in the field will be optimised, with a SIMOPS plan in place
- Reuse or recycling of materials will be the preferential option.

#### Waste

- Onshore treatment will take place at waste management site with appropriate permits and licenses
- UK waste disposal sites will be used where practicable.

#### **Seabed Disturbance**

- Activities which may lead to seabed disturbance planned, managed, and implemented in such a way that disturbance is minimised. A Marine License will be in place for any planned operational disturbance
- Mechanical backfill of the excavated areas, but no remedial seabed levelling of pipeline corridors
- Debris survey undertaken on completion of the activities and where possible resultant debris will be recovered
- Minimising disturbance to seabed from overtrawl through liaison with fishing organisations and regulator.

Following the environmental assessment and implementation of additional control and mitigation measures where necessary, the level of environmental risk from the planned and unplanned decommissioning operations, is **low**. In addition, any cumulative impacts limited to seabed disturbance have been assessed and also considered to be **low**. Therefore, the decommissioning of the Conrie, Don South-West, West Don and Ythan installations, pipelines and associated stabilisation features can be completed without causing significant impact to the environment.



### 5. INTERESTED PARTY CONSULTATIONS

## 5.1 Consultations Summary

During the public consultation period (15 December 2020 to 29 January 2021), copies of the Decommissioning Programmes and supporting documents were forwarded to the following Statutory Consultees:

- The National Federation of Fishermen's Organisations (NFFO);
- The Scottish Fishermen's Federation (SFF);
- The Northern Ireland Fish Producer's Organisation (NIFPO); and,
- Global Marine Group (GMG).

Meetings and telephone calls have been held with SFF to advise of progress and to provide more detail of the proposals. A summary of the proposals were also sent to all Statutory Consultees in advance of the Statutory Consultation.

Copies of the Decommissioning Programmes and supporting documents were made available as a download from the EnQuest website: <a href="https://www.enquest.com/operations/uk-decommissioning">www.enquest.com/operations/uk-decommissioning</a>.

Due to Covid-19 restrictions a bound copy was not sent to the local public library but via the Public Notice advice was provided to advise that a digital or hardcopy of the Decommissioning Programmes can be made available on request.

A public notice was published in the following local newspapers by:

- "Press & Journal" on 15 December 2020;
- "The (Edinburgh) Gazette" on 15 December 2020.

Please refer to Appendix C.1 for a copy of the public notices. The public notice gave instructions for representations to be made in writing by Friday 29 January 2021. EnQuest received no comments or any written or verbal representation from the public in direct response to the public notice or during the public consultation period.

Copies were also submitted for consideration to OPRED.

Table 5.1.1: Summary of Stakeholder Comments				
Who	Comment	Response		
INFORMAL CONSULTATIONS				
GMG				
ITHACA	Issued to Ithaca 03 November 2020.	No adverse comments were received.		
NFFO	The recommendation from the comparative assessment and the decommissioning proposals contained herein were sent to NFFO by email 05 November 2020.	No adverse comments were received with NFFO being happy to defer to SFF as the decommissioning activities would be carried out in Scottish waters.		



Table 5.1.1: Summary of Stakeholder Comments				
Who	Comment	Response		
NIFPO	The recommendation from the comparative assessment and the decommissioning proposals contained herein were sent to NIFPO by email 05 November 2020.	No adverse comments were received with NIFPO being happy to defer to SFF as the decommissioning activities would be carried out in Scottish waters.		
SFF	The recommendation from the comparative assessment and the decommissioning proposals contained herein were presented to SFF in an MS Teams meeting 30 October 2020.	<ul> <li>SFF had no adverse comment to make concerning the Phase 2 decommissioning proposals relating to the departure of the Northern Producer and clearance of the 500m zone;</li> <li>SFF would be inclined to prefer pipelines and umbilicals being left with exposures and non-reportable spans rather than multiple spans being removed leaving cut ends in situ, even though the cut ends would be remediated by reburial or deposition of additional rock;</li> <li>SFF would be inclined to avoid the deposition of additional rock if the area be demonstrated as safe by a successful overtrawl;</li> <li>Use of a chain-mat could be optional and the more usual trawl gear could be used if no snagging hazards appear to be present;</li> <li>There remains a source of tension regarding the requirement to overtrawl and the demonstration of a clear seabed, with the SFF and NFFO arguing that they can only really be satisfied that the seabed is safe for fishing by their having carried an overtrawl rather than it being demonstrated for example by Side Scan Sonar and ROV survey. The idea of avoiding an overtrawl originally arose as a result of concerns of damage to environmentally sensitive areas such as North Norfolk sandbanks in the southern North Sea where JNCC and EMT in particular, has argued against the use over overtrawl.</li> <li>EQ confirmed that any local excavation work would be backfilled; any rock displaced for local excavation work would be reinstated.</li> </ul>		
STATUTORY CONSULTATIONS				
NFFO	The Decommissioning Programmes and supporting documentation were sent to NFFO via email on 15 December 2020.	The NFFO had no adverse comment to make concerning the decommissioning proposals.		
NIFPO	The Decommissioning Programmes and supporting documentation were sent to NIFPO via email on 15 December 2020.	The NIFPO had no adverse comment to make concerning the decommissioning proposals.		



Table 5.1.1: Summary of Stakeholder Comments			
Who	Comment	Response	
SFF	The Decommissioning Programmes and supporting documentation were sent to SFF via email on 15 December 2020.	The SFF had no adverse comment to make concerning the decommissioning proposals.	
GMG	The Decommissioning Programmes and supporting documentation were sent to SFF via email on 15 December 2020.	The GMG had no adverse comment to made concerning the proposals.	
Public		No adverse comment received.	



### 6. PROGRAMME MANAGEMENT

### 6.1 Project Management and Verification

An EnQuest project management team will manage the operations of competent contractors selected for all decommissioning activities. The team will ensure the decommissioning is executed safely, in accordance with legislation and EnQuest Health and Safety principles. If required, changes to the Decommissioning Programmes will be discussed with OPRED with any necessary approvals sought.

### 6.2 Post-Decommissioning Debris Clearance and Verification

The 500m safety zones will be subject to clear seabed assessment when the decommissioning activities have concluded.

As indicated in Figure 6.3.1, it is proposed that post decommissioning surveys near the Wye Structure (i.e. SALB) and Thistle 500m zone will be addressed and reported as part of Thistle decommissioning activities.

It is proposed that EnQuest will work with OPRED and SFF on behalf of the Section 29 Holders to investigate use of an evidence-based approach to establish an acceptable clear seabed for the 500m zone. As the seabed is not in an environmentally sensitive area, an overtrawl will be carried out to verify the pipeline corridor and condition of the seabed after decommissioning activities have been completed. The overtrawl will be supported by a Certificate of Clearance. Evidence of a clear seabed will also be included in the Close Out Report and sent to the Seabed Data Centre (Offshore Installations) at the Hydrographic Office.

Following completion of decommissioning activities an 'as-left' environmental survey will be carried out, with the main findings documented in the final Close Out Report.

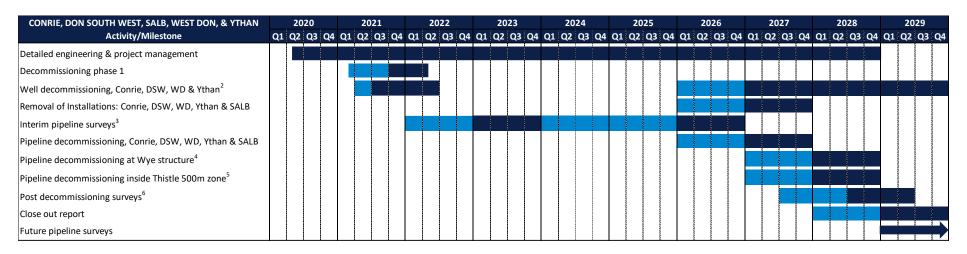
Any oil and gas debris will be recovered from the seabed for onshore disposal or recycling in line with existing disposal methods.

#### 6.3 Schedule

A proposed schedule is provided in Figure 6.3.1. The activities are subject to the acceptance of the Decommissioning Programmes presented in this document and any unavoidable constraints (e.g. vessel availability) that may be encountered while executing the decommissioning activities. Therefore, activity schedule windows have been included to account for this uncertainty.

The commencement of offshore decommissioning activities will depend on commercial agreements and commitments. EnQuest will examine the possibility of including the offshore work in a wider campaign of subsea works to reduce costs.





#### Notes / Key

Most likely period of activity

ries

Activity window to allow campaigning flexibility associated with decommissioning activities

- 1. Current indications are that NP FPF sailaway & Phase 1 of the decommissioning will be carried out early Q2 2021;
- 2. The first phase of well decommissioning will address wells with known integrity issues;
- 3. Most recent surveys were conducted in 2019. Timing and frequency of interim pipeline surveys to be agreed with OPRED
- 4. Decommissioning of pipelines and infrastructure at Wye structure (i.e. PL2578 & PL2579) will likely be carried out in the same campaign as PL4555 & PL4556; both these pipelines are part of the Thistle pipeline infrastructure;
- 5. Decommissioning of pipelines (i.e. PLU2580, PLU2580JSO, PLU2580JSG, and PL2579) and associated infrastructure on approach to Thistle 'A' will likely be carried out in the same campaign as PL4555 and other pipelines associated with Thistle.
- 6. Post decommissioning surveys near the Wye Structure (i.e. SALB) and Thistle 500m zone will be addressed and reported as part of Thistle decommissioning activities.

Figure 6.3.1: Gantt Chart of Project Plan



#### 6.4 Costs

Decommissioning costs will be provided separately to OPRED and OGA.

### 6.5 Close Out Report

In accordance with OPRED guidelines, a Close Out Report will be submitted to OPRED explaining any variations from the DP, normally within 12 months of completion of the offshore decommissioning scope.

As indicated in Figure 6.3.1, it is proposed that the close out for the areas near the Wye Structure (i.e. SALB) and inside the Thistle 'A' 500m zone will be addressed and reported as part of Thistle 'related decommissioning activities.

### 6.6 Post-Decommissioning Monitoring and Evaluation

The frequency of future surveys and the requirement for legacy and liability management will be described in the Close Out report and agreed with OPRED. The approach will be supported with a risk assessment.

It is proposed that residual liability for individual pipelines remaining *in situ* following the decommissioning works associated with these Decommissioning Programmes will remain with the respective DSW & WD, DSW and WD Section 29 holders identified in Section 1.5 (Table 1.5.2, Table 1.5.6, and Table 1.5.8 respectively). Unless agreed otherwise in advance with OPRED, EnQuest will remain the focal point for such matters, such as any change in ownership, for example.

The requirement for legacy and liability management will be described in more detail in the Close Out report.



### 7. REFERENCES

- [1] EnQuest (2020) Combined Decommissioning Programmes for Northern Producer FPF Float-off and Disconnection of Risers and Pipelines, M4109-ENQ-NPR-DN-00-PRG-0001;
- [2] EnQuest (2020) Don South-West and West Don Pipeline Decommissioning Comparative AssessmentM4109-ENQ-NPR-DN-00-REP-0001;
- [3] Xodus (2020) Conrie, Don South-West, West Don, and Ythan Decommissioning Environmental Appraisal, M4109-X0D-DPR-SA-00-REP-0001.



# APPENDIX A NORTHERN PRODUCER PRIOR TO DEPARTURE

# Appendix A.1 Layout prior to departure of Northern Producer

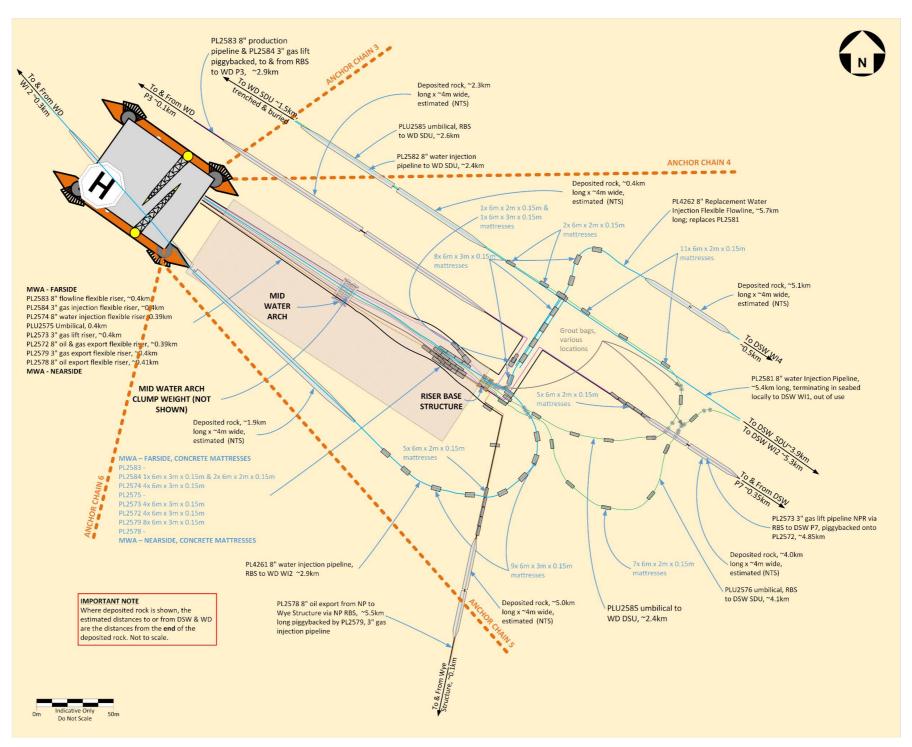


Figure A.1.1: Original Northern Producer layout prior to departure (Phase 1 DP scope)



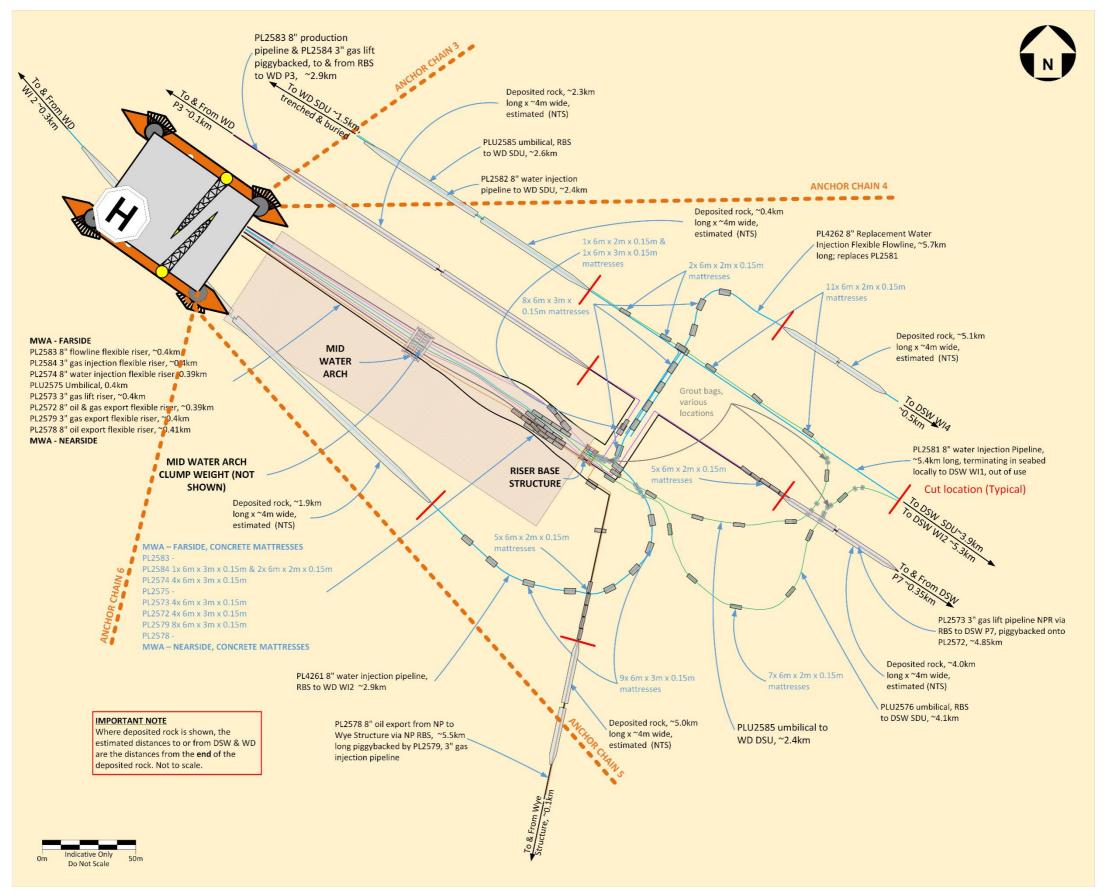


Figure A.1.2: Phase 1 - Pipeline cut locations in 500m zone (Phase 1 DP scope



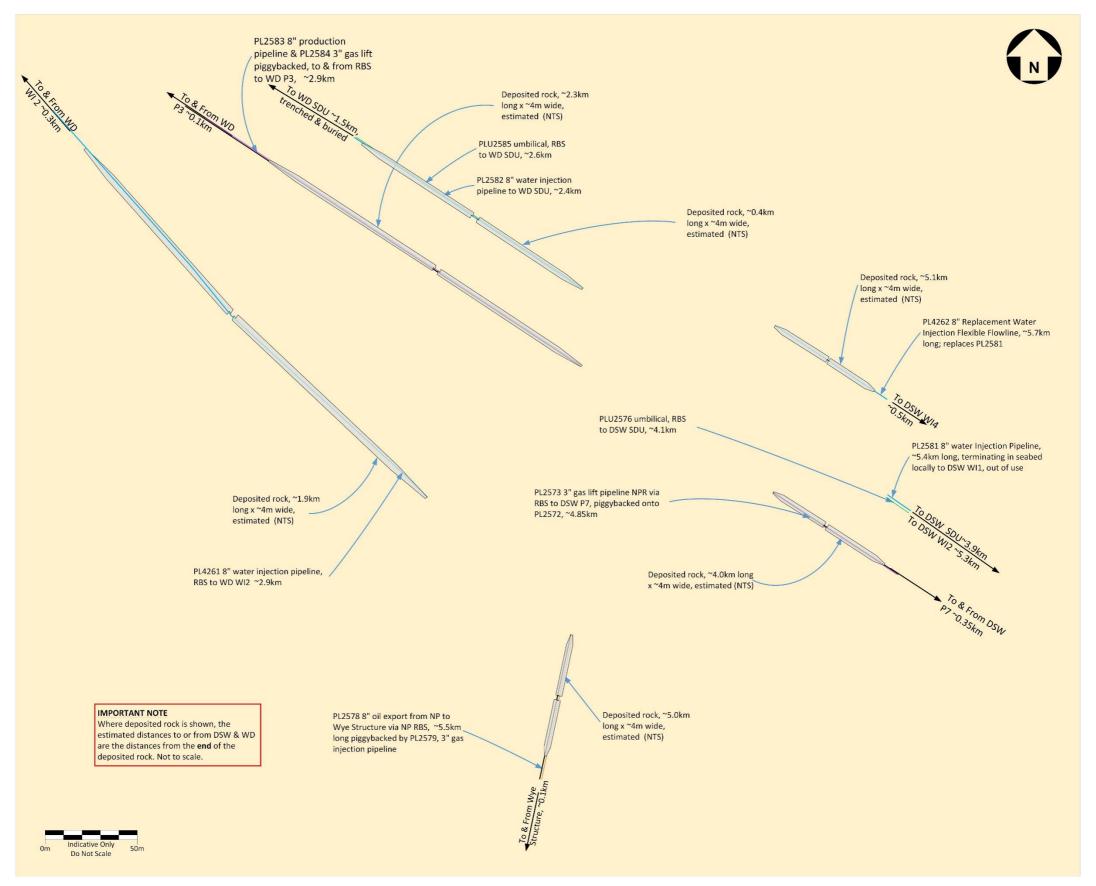


Figure A.1.3: Phase 2 – After clearance of NP 500m zone (Phase 1 DP scope completed)



# APPENDIX B LAYOUTS OF DSW, WD FIELDS, WYE STRUCTURE & THISTLE 'A'

# Appendix B.1 Don South-West Production (with Conrie & Ythan)

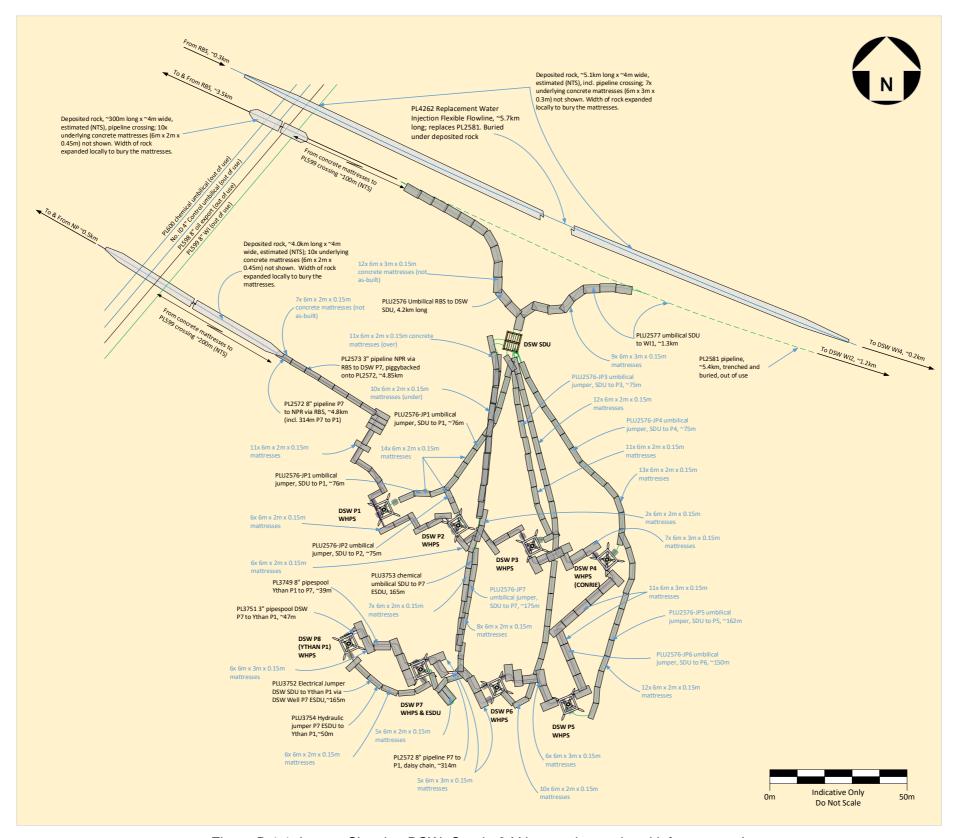


Figure B.1.1: Layout Showing DSW, Conrie & Ythan and associated infrastructure)



# Appendix B.2 Don South-West WI

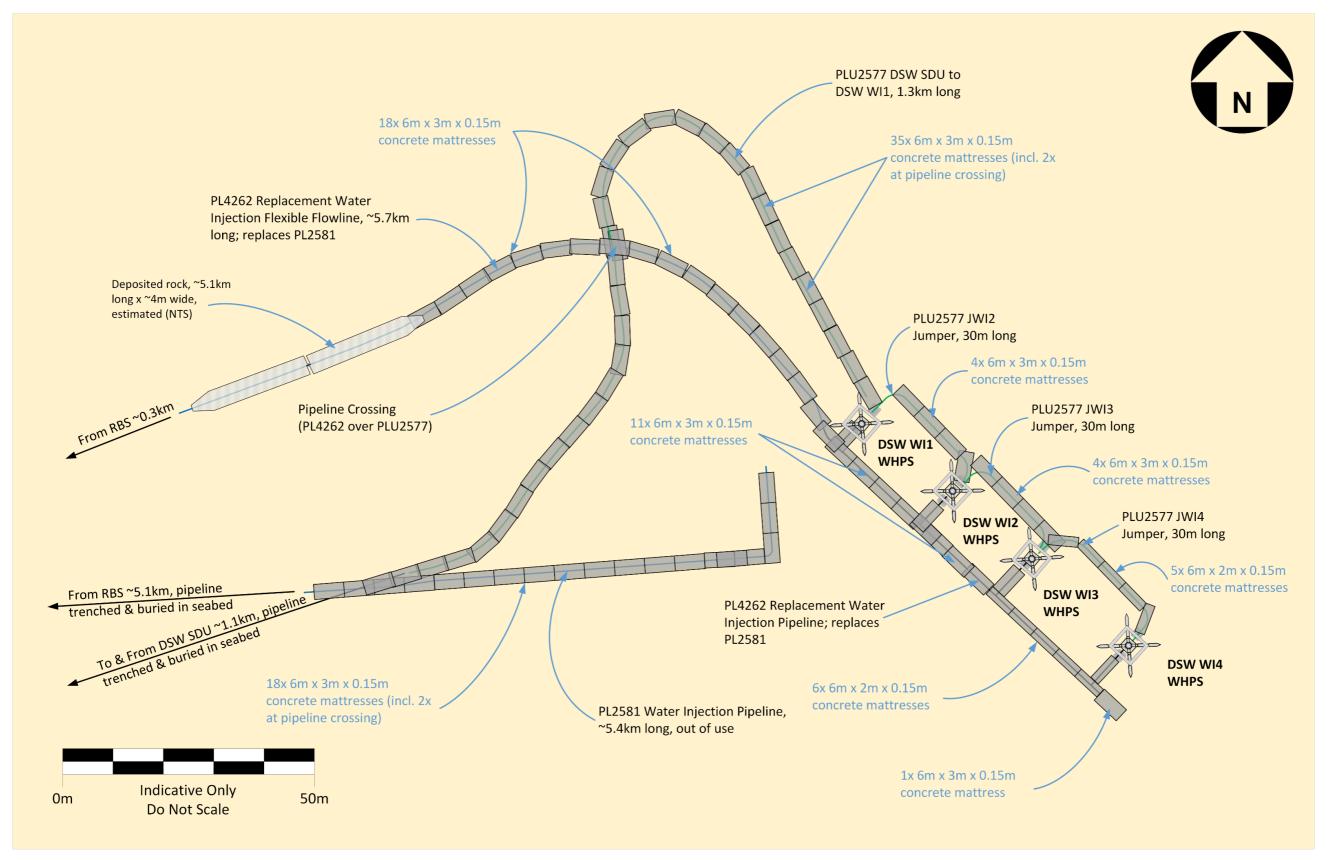


Figure B.2.1: Layout showing DSW WI and associated infrastructure



## Appendix B.3 West Don Production & WI

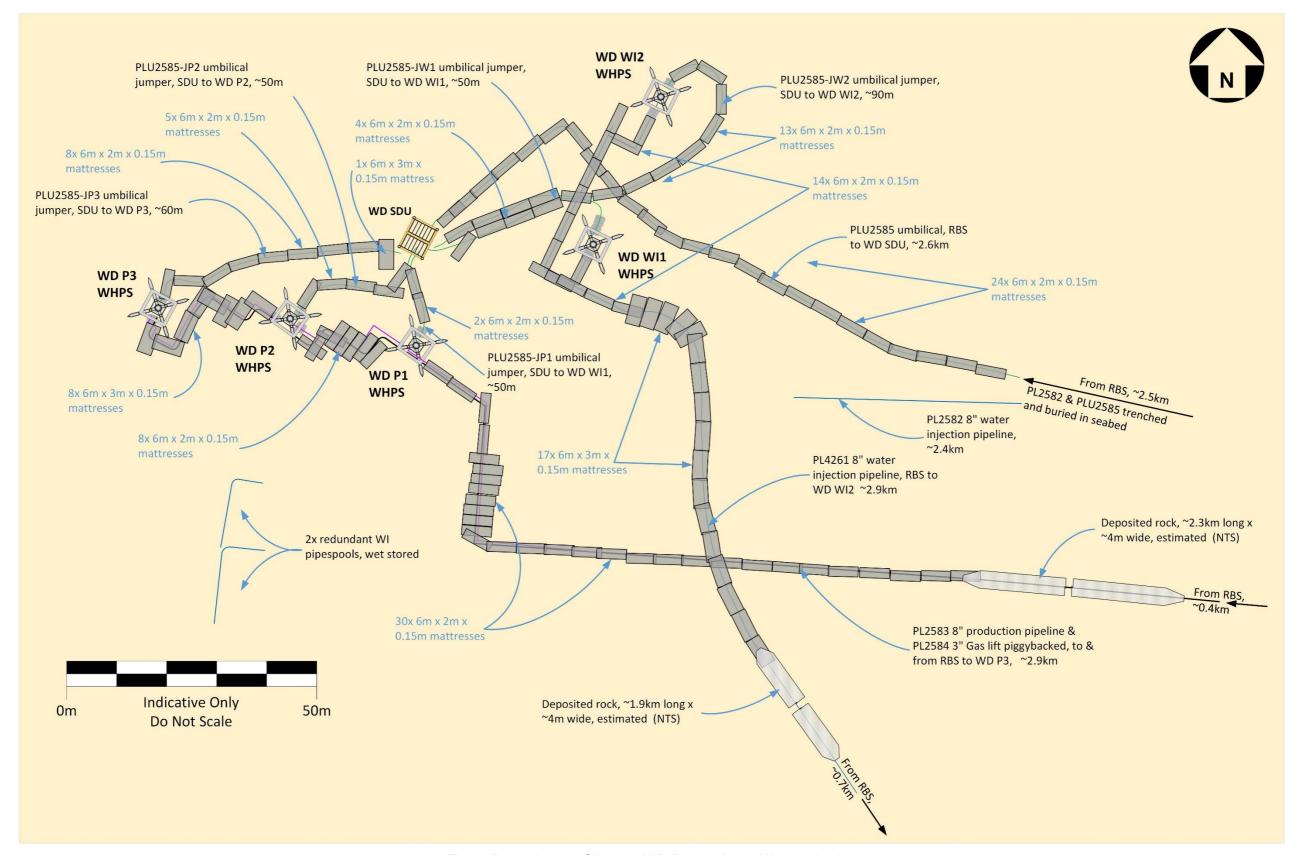


Figure B.3.1: Layout Showing WD Production & Water Injection



# Appendix B.4 Wye Structure & Approaches

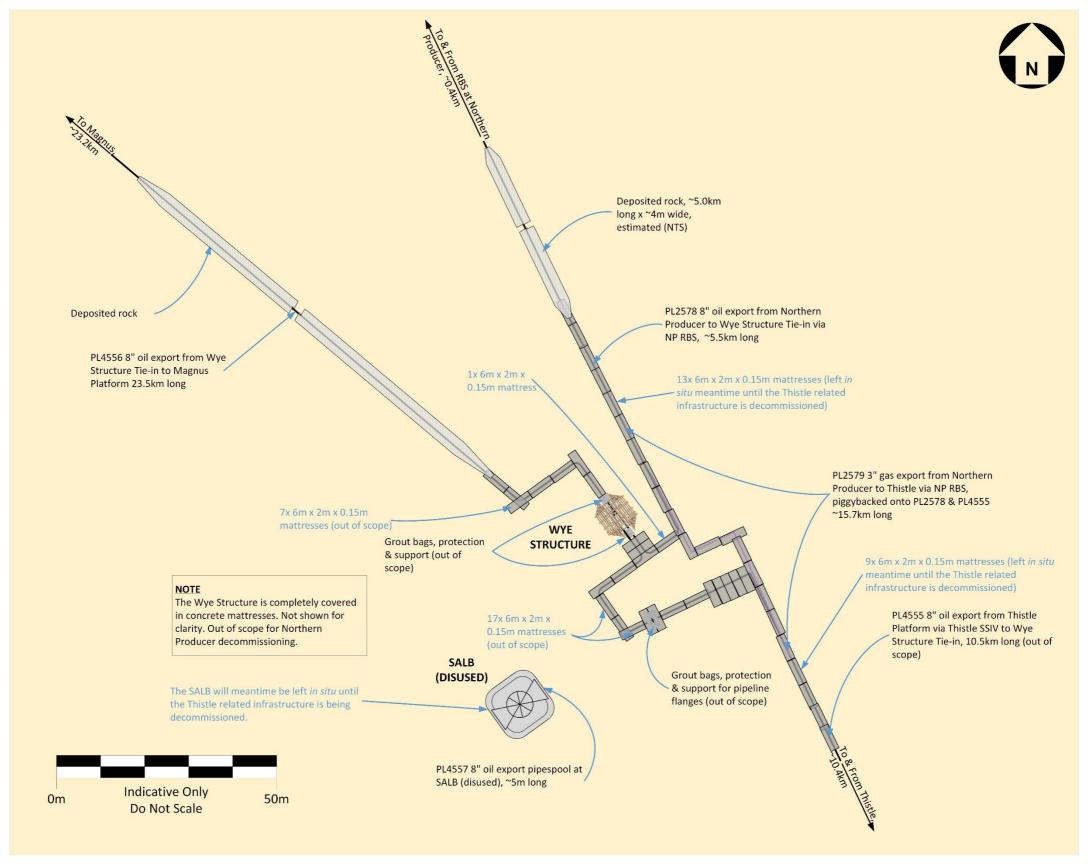


Figure B.4.1: Layout Showing Wye Structure & Approaches



## Appendix B.5 Thistle 'A' Approaches

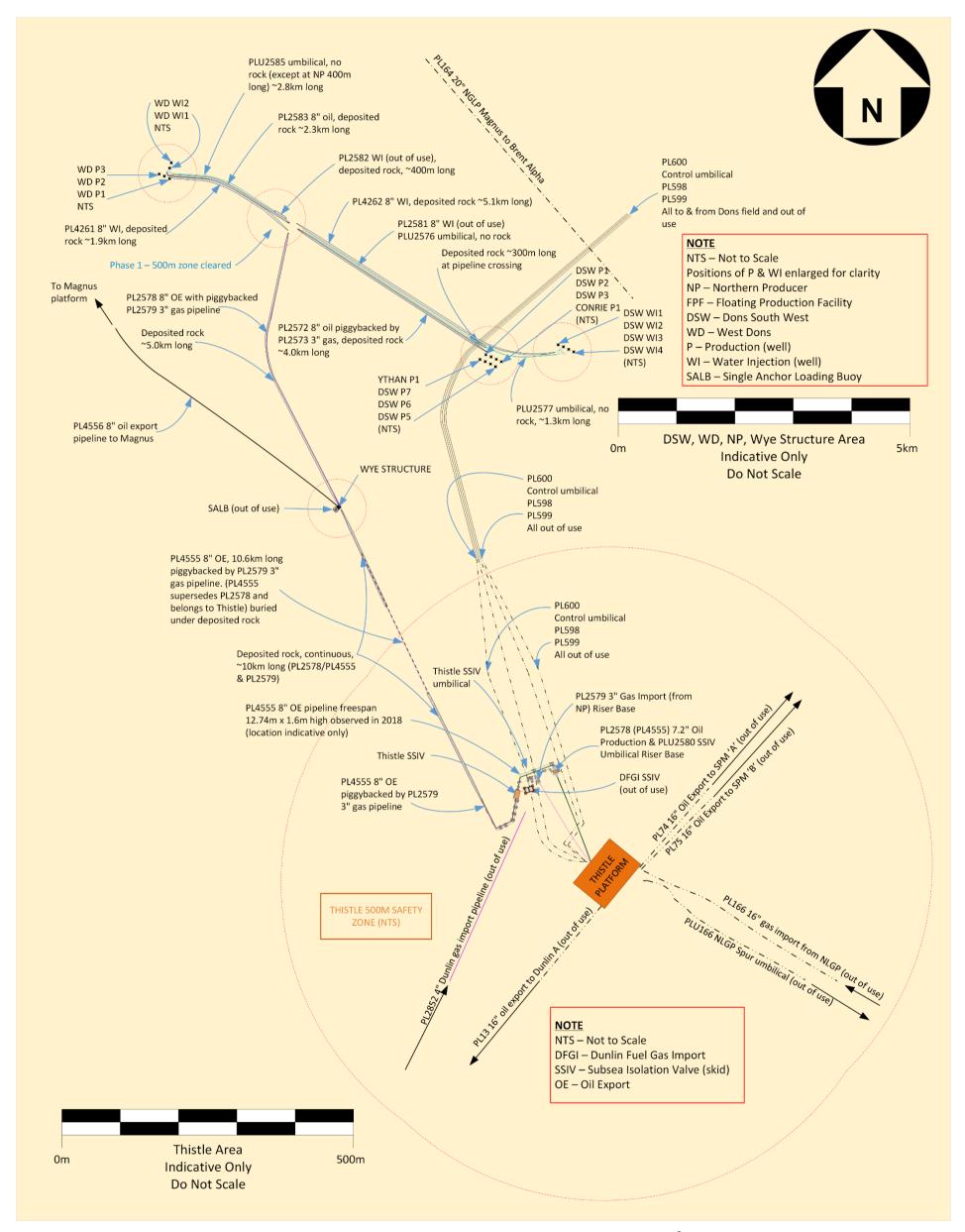


Figure B.5.1: Layout Showing Approaches to Thistle 'A'2



 $<sup>^{2}</sup>$  This figure should not be relied upon for details concerning infrastructure relating to Thistle 'A' installation.

## APPENDIX C PUBLIC NOTICE & CONSULTEE CORRESPONDENCE

## **Appendix C.1 Public Notices**

#### **ENQUEST HEATHER LIMITED** PETROLEUM ACT 1998 CONRIE, DON SOUTH WEST, WEST DON & YTHAN FIELD DECOMMISSIONING

EnQuest Heather Limited has submitted, for the consideration of the Secretary of State for Business, Energy & Industrial Strategy, draft Decommissioning Programmes for the Conrie, Don South West, West Don and Ythan fields located in UK Blocks 211/13b, 211/18a, and 211/18e of the Northern North Sea Sector of the United Kingdom Continental Shelf. In accordance with the provisions of the Petroleum Act 1998, it is a requirement of the Act that interested parties be consulted on such decommissioning proposals.

The facilities covered by the Decommissioning Programmes are: Don South West and West Don Single Anchor Loading Buoy Mooring Base ('SALB');
• Don South West and West Don pipelines PL2578, PL2579,

- PLU2580, PLU2580JSG, and PLU2580JSO;
- · Conrie wellhead protection structure (1x);
- · Conrie pipelines PL2572 (original identification numbers 5 to 8 only), PL2573 (original identification numbers 18 to 21 only) and PLU2576JP4;
- Don South West wellhead protection structures (10x);
- Don South West wellnead protection structures (10x),
   Don South West pipelines PL2572 (excluding identification numbers 5 to 8), PL2573 (excluding identification numbers 18 to 21), PLU2576, PLU2576JP1 through PLU2576JP7, PLU2577, PLU2577JWI2, PLU2577JWI3, PLU2577JWI4, PL2581, PL4262, and PL4557;
- West Don wellhead protection structures (5x);
- West Don pipelines PL2582, PL2583, PL2584, PLU2585, PLU2585JP1, PLU2585JP2, PLU2585JP3, and PLU2585JP1, PLU2585JP2, PLU2585JW11, PLU2585JW12, and PL4261;
- · Ythan wellhead protection structure (1x); and
- Ythan pipelines PL3749, PL3751, PLU3752, PLU3753, and PLU3754

The SALB is located approximately 521km North-North East of Aberdeen while the Conrie, Don South West, West Don and Ythan fields are located approximately 527km North-North East of Aberdeen.

EnQuest Heather Limited hereby gives notice that the combined Decommissioning Programmes for Conrie, Don South West, West Don and Ythan fields and associated installations and pipeline infrastructure can be viewed at internet addresses: www.enquest.com/operations/uk-decommissioning

Alternatively, a digital or hardcopy of the Decommissioning Programmes can be requested from Mr Ian Wood at ian.wood@ enquest.com.

Interested parties are kindly requested to submit any representations in writing or electronically by 29 January 2021 to the following address for the attention of Mr Ian Wood:

EnQuest Heather Limited 5th Floor, Cunard House 15 Regent Street London SW1Y 4LR Date 16 December 2020.

#### Pipe-Lines

#### **ENQUEST HEATHER LIMITED** PETROLEUM ACT 1998

#### CONRIE, DON SOUTH WEST, WEST DON & YTHAN FIELD DECOMMISSIONING

EnQuest Heather Limited has submitted, for the consideration of the Secretary of State for Business, Energy & Industrial Strategy, draft Decommissioning Programmes for the Conrie, Don South West, West Don and Ythan fields located in UK Blocks 211/13b, 211/18a, and 211/18e of the Northern North Sea Sector of the United Kingdom Continental Shelf. In accordance with the provisions of the Petroleum Act 1998, it is a requirement of the Act that interested parties be consulted on such decommissioning proposals

The facilities covered by the Decommissioning Programmes are

- . Don South West and West Don Single Anchor Loading Buoy Mooring Base ('SALB');
- · Don South West and West Don pipelines PL2578, PL2579, PLU2580, PLU2580JSG, and PLU2580JSO:
- · Conrie pipelines PL2572 (original identification numbers 5 to 8 only), PL2573 (original identification numbers 18 to 21 only) and PLU2576JP4;
- . Don South West wellhead protection structures (10x):
- · Don South West pipelines PL2572 (excluding identification numbers 5 to 8), PL2573 (excluding identification numbers 18 to 21), PLU2576, PLU2576JP1 through PLU2576JP7, PLU2577, PLU2577JWI2, PLU2577JWI3, PLU2577JWI4, PL2581, PL4262, and PL4557;
- West Don pipelines PL2582, PL2583, PL2584, PLU2585, PLU2585JP1, PLU2585JP2, PLU2585JP3, and PLU2585JWI1, PLU2585JWI2, and PL4261;
- · Ythan wellhead protection structure (1x); and
- Ythan pipelines PL3749, PL3751, PLU3752, PLU3753, and PLU3754.

The SALB is located approximately 521km North-North East of Aberdeen while the Conrie, Don South West, West Don and Ythan fields are located approximately 527km North-North East of Aberdeen.

EnQuest Heather Limited hereby gives notice that the combined Decommissioning Programmes for Conrie. Don South West, West Don and Ythan fields and associated installations and pipeline infrastructure can be viewed at the internet address: www.enquest.com/operations/ukdecommissioning

Alternatively, a digital or hardcopy of the Decommissioning Programmes can be requested from Mr Ian Wood at ian.wood@enquest.com

Interested parties are kindly requested to submit any representations in writing or electronically by 29 January 2021 to the following address for the attention

EnQuest Heather Limited

5th Floor, Cunard House

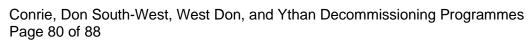
15 Regent Street

SW1Y4LR

Date 15 December 2020

Table C.1.1: Public Notices: Press & Journal & The Edinburgh Gazette (published 15 Dec 2020)<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Although the date at the bottom of the P&J Public Notice suggests 16 December 2020, the Public Notice was published 15 December 2020.





## Appendix C.2 NFFO - Mr Ian Rowe, via email

# **NFFO Services Ltd**



30 Monkgate York YO31 7PF Tel:01904 635 432 15<sup>th</sup> January 2021.

lan Wood Head of Communications and Investor Relations

**EnQuest Heather Limited** 

15 Lower Regent Street

Cunard House,

London,

SW1Y 4LR

#### Hello lan

In reference to the Northern Producer FPF and Don west & south west Don fields decommissioning program and all associated pipelines.

The National Federation Fisherman's Organisation would like to thank EnQuest Heather Limited for the detailed documentation explaining the planned methodology on planned decommissioning of these assets.

Due to the geographical area of the planned decommissioning of assets which in Scottish Waters the NFFO have no comments regarding the decommissioning program as the Scottish Fishermen's Federation who we work closely with are best placed to comment and raise any concerns if required.

Kind Regards

Ian Rowe

NFFO Services

General Manager.

From: Wood, Ian <Ian.Wood@enquest.com>

Sent: 15 December 2020 09:17

To: ian@nffo.org.uk

Conrie, Don South-West, West Don, and Ythan Decommissioning Programmes Page 81 of 88



Cc: S. Axon; D. Muriel, G. Donald (Northern Offshore Ltd)

Subject: The Dons Decommissioning Phase 2 - Statutory Consultation: NFFO

Dear Ian,

#### **ENQUEST HEATHER LIMITED**

#### **PETROLEUM ACT 1998**

## CONRIE, DON SOUTH-WEST, WEST DON & YTHAN FIELD DECOMMISSIONING

EnQuest Heather Limited has submitted, for the consideration of the Secretary of State for Business, Energy & Industrial Strategy, draft Decommissioning Programmes for the Conrie, Don South-West, West Don and Ythan fields located in UK Blocks 211/13b, 211/18a, and 211/18e of the Northern North Sea Sector of the United Kingdom Continental Shelf. In accordance with the provisions of the Petroleum Act 1998, it is a requirement of the Act that interested parties be consulted on such decommissioning proposals.

The facilities covered by the Decommissioning Programmes are:

- Don South-West and West Don Single Anchor Loading Buoy Mooring Base ('SALB');
- Don South-West and West Don pipelines PL2578, PL2579, PLU2580, PLU2580JSG, and PLU2580JSO;
- Conrie wellhead protection structure (1x);
- Conrie pipelines PL2572 (original identification numbers 5 to 8 only), PL2573 (original identification numbers 18 to 21 only) and PLU2576JP4;
- Don South-West wellhead protection structures (10x);
- Don South-West pipelines PL2572 (excluding identification numbers 5 to 8), PL2573 (excluding identification numbers 18 to 21), PLU2576, PLU2576JP1 through PLU2576JP7, PLU2577, PLU2577JWI2, PLU2577JWI3, PLU2577JWI4, PL2581, PL4262, and PL4557;
- West Don wellhead protection structures (5x);
- West Don pipelines PL2582, PL2583, PL2584, PLU2585, PLU2585JP1, PLU2585JP2, PLU2585JP3, and PLU2585JW11, PLU2585JW12, and PL4261;
- Ythan wellhead protection structure (1x); and
- Ythan pipelines PL3749, PL3751, PLU3752, PLU3753, and PLU3754.

The SALB is located approximately 521km North-North-East of Aberdeen while the Conrie, Don South-West, West Don and Ythan fields are located approximately 527km North-North East of Aberdeen.

EnQuest Heather Limited hereby gives notice that the combined Decommissioning Programmes for Conrie, Don South-West, West Don and Ythan fields and associated installations and pipeline infrastructure can be viewed at the internet address: www.enquest.com/operations/uk-decommissioning.

Separately you will receive a document transmittal from our document control department, please can you return this to acknowledge receipt.

Please can you confirm that you've received all the information you require, and if you have any questions or concerns, please make any representations to the undersigned by 29 January 2021. Kind regards



## Appendix C.3 NIFPO - Mr Wayne Sloan

From: Wayne Sloan <waynes@fpoffshoreservices.co.uk>

Sent: 01 February 2021 18:31

To: S. Axon

Subject: Re: Fw: The Dons Decommissioning Phase 1 - Statutory Consultation: NIFPO

Hi Simon,

My apologies for the delay in responding. I have nothing to add to both phase 1 and 2 documents.

Many thanks for your patience.

Kind Regards

Wayne Sloan, Offshore Manager, FP Offshore Services (NI) Ltd

From: Wood, Ian < Ian. Wood@enquest.com>

**Sent:** 15 December 2020 09:16

To: waynes@fpoffshoreservices.co.uk

Cc: S. Axon; D. Muriel, G. Donald (Northern Offshore Ltd)

Subject: The Dons Decommissioning Phase 2 - Statutory Consultation: NIFPO

Dear Wayne,

**ENQUEST HEATHER LIMITED** 

**PETROLEUM ACT 1998** 

## CONRIE, DON SOUTH-WEST, WEST DON & YTHAN FIELD DECOMMISSIONING

EnQuest Heather Limited has submitted, for the consideration of the Secretary of State for Business, Energy & Industrial Strategy, draft Decommissioning Programmes for the Conrie, Don South-West, West Don and Ythan fields located in UK Blocks 211/13b, 211/18a, and 211/18e of the Northern North Sea Sector of the United Kingdom Continental Shelf. In accordance with the provisions of the Petroleum Act 1998, it is a requirement of the Act that interested parties be consulted on such decommissioning proposals.

The facilities covered by the Decommissioning Programmes are:

- Don South-West and West Don Single Anchor Loading Buoy Mooring Base ('SALB');
- Don South-West and West Don pipelines PL2578, PL2579, PLU2580, PLU2580JSG, and PLU2580JSO;
- Conrie wellhead protection structure (1x);
- Conrie pipelines PL2572 (original identification numbers 5 to 8 only), PL2573 (original identification numbers 18 to 21 only) and PLU2576JP4;
- Don South-West wellhead protection structures (10x);
- Don South-West pipelines PL2572 (excluding identification numbers 5 to 8), PL2573 (excluding identification numbers 18 to 21), PLU2576, PLU2576JP1 through PLU2576JP7, PLU2577, PLU2577JWI2, PLU2577JWI3, PLU2577JWI4, PL2581, PL4262, and PL4557;
- West Don wellhead protection structures (5x);
- West Don pipelines PL2582, PL2583, PL2584, PLU2585, PLU2585JP1, PLU2585JP2, PLU2585JP3, and PLU2585JWI1, PLU2585JWI2, and PL4261;
- Ythan wellhead protection structure (1x); and
- Ythan pipelines PL3749, PL3751, PLU3752, PLU3753, and PLU3754.

The SALB is located approximately 521km North-North-East of Aberdeen while the Conrie, Don South-West, West Don and Ythan fields are located approximately 527km North-North East of Aberdeen.

EnQuest Heather Limited hereby gives notice that the combined Decommissioning Programmes for Conrie, Don South-West, West Don and Ythan fields and associated installations and pipeline infrastructure can be viewed at the internet address: www.enquest.com/operations/uk-decommissioning.

Separately you will receive a document transmittal from our document control department, please can



you return this to acknowledge receipt.

Please can you confirm that you've received all the information you require, and if you have any questions or concerns, please make any representations to the undersigned by 29 January 2021. Kind regards



## Appendix C.4 SFF - Mr Steven Alexander & Mr Andrew Third



Scottish Fishermen's Federation 24 Rubislaw Terrace Aberdeen, AB10 1XE

T: +44 (0) 1224 646944 F: +44 (0) 1224 647058 E: sff@sff.co.uk

www.sff.co.uk

18 January 2021

Our Ref:

Your Ref:

lan Wood Head of Communications and Investor Relations EnQuest PIC 15 Lower Regent Street Cunard House London SWIY 4LR

Dear lan

#### THE DONS DECOMMISSIONING PHASES 1 AND 2 - STATUTORY CONSULTATION DRAFTS

I refer to the Consultation on Draft Decommissioning Programmes and key supporting documentation provided in your emails of 15 December 2020.

The Scottish Fishermen's Federation (SFF) appreciates the clearly laid out and detailed explanation of EnQuest's decommissioning proposals for the Dons Decommissioning Phases 1 and 2 programmes and place on record our appreciation of the information provided and discussions held at earlier briefing sessions.

As highlighted to your colleagues previously, the concerns of fishermen remain primarily that of safety and the physical impact on the fishing grounds of the long-term presence of oil industry infrastructure on the seabed.

We are therefore pleased to note that under the Dons Decommissioning Phase 1 programme, it is EnQuest's intention to remove the Northern Producer FPF and that the associated riser systems from Don South West and West Don fields will be disconnected and recovered to a point where no snagging hazards remain within the 500m safety zone.

In relation to the Dons Decommissioning Phase 2 programme, it is noted that the Conrie, Don South West, West Don and Ythan installations, along with the SALBMB will be fully removed as will all associated surface laid pipelines. It is further noted that the wells associated with the aforementioned sites will all be decommissioned in line with latest OGUK guidelines and that no drill cutting piles exist.

In relation to sections of pipelines and umbilicals that are trenched and buried along their length, we accept the reasoning behind the recommendation (based on the outcome of the comparative assessment of feasible

Member

Anglo Scottish Fishermen's Association - Fife Fishermen's Association - Fishing Vessel Agents & Owners Association (Scotland) Ltd Mallaig & North-West Fishermen's Association Ltd - The Fishing Vessel Agents & Owners Association Ltd - The Fishing Vessel Agents & Owners Association Ltd - The Fishing Vessel Agents & Owners Association Ltd - The Fishing Vessel Agents & Owners & Owne

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options) of leaving these in situ with minimum intervention in order to minimise seabed disturbance. Th phased decommissioning approach for specific pipelines is also noted.

As you will be aware, any pipelines left on the seabed represent a legacy issue and will require on going monitoring. Where rock cover is deployed, we would look for the size and profile of the rock to follow normal industry standards and would recommend that such rock dump berms are incorporated into the post decommissioning debris clearance trawl sweeps to verify that, at the time of deposit, they did not pose a risk to fishing.

As highlighted during the earlier EnQuest-SFF briefing sessions, given past experiences of both abandoned wellhead and oil and gas fields in the process of being decommissioned, the SFF has serious reservations regarding the use of survey data to verify that an area is safe for fishing activity to resume following decommissioning activity. It is our view that the undertaking of trawl verification sweeps under controlled conditions, which replicated the fishing operations that will be permitted in the area following the decommissioning work, is the best method of establishing that it is safe for fishing to resume in said area. With this in mind, we are pleased to hear that as the seabed in question is not in an environmentally sensitive area, EnQuest are proposing that trawl verification sweeps are carried out to establish an acceptable clear seabed for the relevant 500m safety zones and pipeline corridors.

Finally, and as highlighted previously, detailed information regarding the SFF's Oil and Gas Decommissioning Policy and accompanying Key Principles document can be viewed via the SFF's website using the following link: <a href="https://www.sff.cou.ky/sff.offshore-oil-gas-decommissioning-policy">https://www.sff.cou.ky/sff.offshore-oil-gas-decommissioning-policy</a>.

V-----

Steven Alexander

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From: Wood, Ian <lan.Wood@enquest.com>

Sent: 15 December 2020 09:02

To: <u>s.alexander@sff.co.uk</u>, <u>a.third@sff.co.uk</u>

Cc: S. Axon; D. Muriel, G. Donald (Northern Offshore Ltd)

Subject: The Dons Decommissioning Phase 2 - Statutory Consultation: SFF

Dear Steven, Andrew,

## **ENQUEST HEATHER LIMITED**

#### **PETROLEUM ACT 1998**

#### CONRIE, DON SOUTH-WEST, WEST DON & YTHAN FIELD DECOMMISSIONING

EnQuest Heather Limited has submitted, for the consideration of the Secretary of State for Business, Energy & Industrial Strategy, draft Decommissioning Programmes for the Conrie, Don South-West, West Don and Ythan fields located in UK Blocks 211/13b, 211/18a, and 211/18e of the Northern North Sea Sector of the United Kingdom Continental Shelf. In accordance with the provisions of the Petroleum Act 1998, it is a requirement of the Act that interested parties be consulted on such decommissioning proposals.

The facilities covered by the Decommissioning Programmes are:

- Don South-West and West Don Single Anchor Loading Buoy Mooring Base ('SALB');
- Don South-West and West Don pipelines PL2578, PL2579, PLU2580, PLU2580JSG, and

**EnQuest** 

#### PLU2580JSO:

- Conrie wellhead protection structure (1x);
- Conrie pipelines PL2572 (original identification numbers 5 to 8 only), PL2573 (original identification numbers 18 to 21 only) and PLU2576JP4;
- Don South-West wellhead protection structures (10x);
- Don South-West pipelines PL2572 (excluding identification numbers 5 to 8), PL2573 (excluding identification numbers 18 to 21), PLU2576, PLU2576JP1 through PLU2576JP7, PLU2577, PLU2577JWI2, PLU2577JWI3, PLU2577JWI4, PL2581, PL4262, and PL4557;
- West Don wellhead protection structures (5x);
- West Don pipelines PL2582, PL2583, PL2584, PLU2585, PLU2585JP1, PLU2585JP2, PLU2585JP3, and PLU2585JWI1, PLU2585JWI2, and PL4261;
- Ythan wellhead protection structure (1x); and
- Ythan pipelines PL3749, PL3751, PLU3752, PLU3753, and PLU3754.

The SALB is located approximately 521km North-North East of Aberdeen while the Conrie, Don South-West, West Don and Ythan fields are located approximately 527km North-North East of Aberdeen.

EnQuest Heather Limited hereby gives notice that the combined Decommissioning Programmes for Conrie, Don South-West, West Don and Ythan fields and associated installations and pipeline infrastructure can be viewed at the internet address: www.enquest.com/operations/uk-decommissioning.

Separately you will receive a document transmittal from our document control department, please can you return this to acknowledge receipt.

Please can you confirm that you've received all the information you require, and if you have any questions or concerns, please make any representations to the undersigned by 29 January 2021. Kind regards



## Appendix C.5 GMG - Mr Alex Riddell

From: Riddell, Alex (Global Marine Group) <Alex.Riddell@oceaniq.co.uk>

Sent: 07 January 2021 15:28

To: Wood, lan <lan.Wood@enquest.com>

**Cc:** S. Axon, G. Donald (Northern Offshore Limited), D. Muriel, Decom DCC **Subject:** RE: The Dons Decommissioning Phase 2 - Statutory Consultation: GMG

Hi lan,

I can confirm receipt of the combined Decommissioning Programmes for Conrie, Don South-West, West Don and Ythan fields.

I have reviewed the documentation provided for the Kingfisher Decommissioning Programs and as there does not appear to be any telecommunication cables in the near vicinity, no further comments from me.

In the event that any plans change, if any seabed invasive operations are to be conducted near any telecommunication assets, please can the cable owner be notified in advance. Contact details of cable systems can be found in the following link. https://kis-orca.eu/map/

Thanks, Alex

From: Wood, lan <lan.Wood@enquest.com>

Sent: 15 December 2020 09:01

To: alexriddell@globalmarinegroup.com

Cc: S. Axon; D. Muriel, G. Donald (Northern Offshore Ltd)

Subject: The Dons Decommissioning Phase 2 - Statutory Consultation: GMG

Dear Alex.

**ENQUEST HEATHER LIMITED** 

**PETROLEUM ACT 1998** 

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- Don South-West and West Don pipelines PL2578, PL2579, PLU2580, PLU2580JSG, and PLU2580JSO:
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- West Don wellhead protection structures (5x);
- West Don pipelines PL2582, PL2583, PL2584, PLU2585, PLU2585JP1, PLU2585JP2, PLU2585JP3, and PLU2585JW11, PLU2585JW12, and PL4261;
- Ythan wellhead protection structure (1x); and
- Ythan pipelines PL3749, PL3751, PLU3752, PLU3753, and PLU3754.

The SALB is located approximately 521km North-North-East of Aberdeen while the Conrie, Don South-West, West Don and Ythan fields are located approximately 527km North-North East of Aberdeen.



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Separately you will receive a document transmittal from our document control department, please can you return this to acknowledge receipt.

Please can you confirm that you've received all the information you require, and if you have any questions or concerns, please make any representations to the undersigned by 29 January 2021. Kind regards

