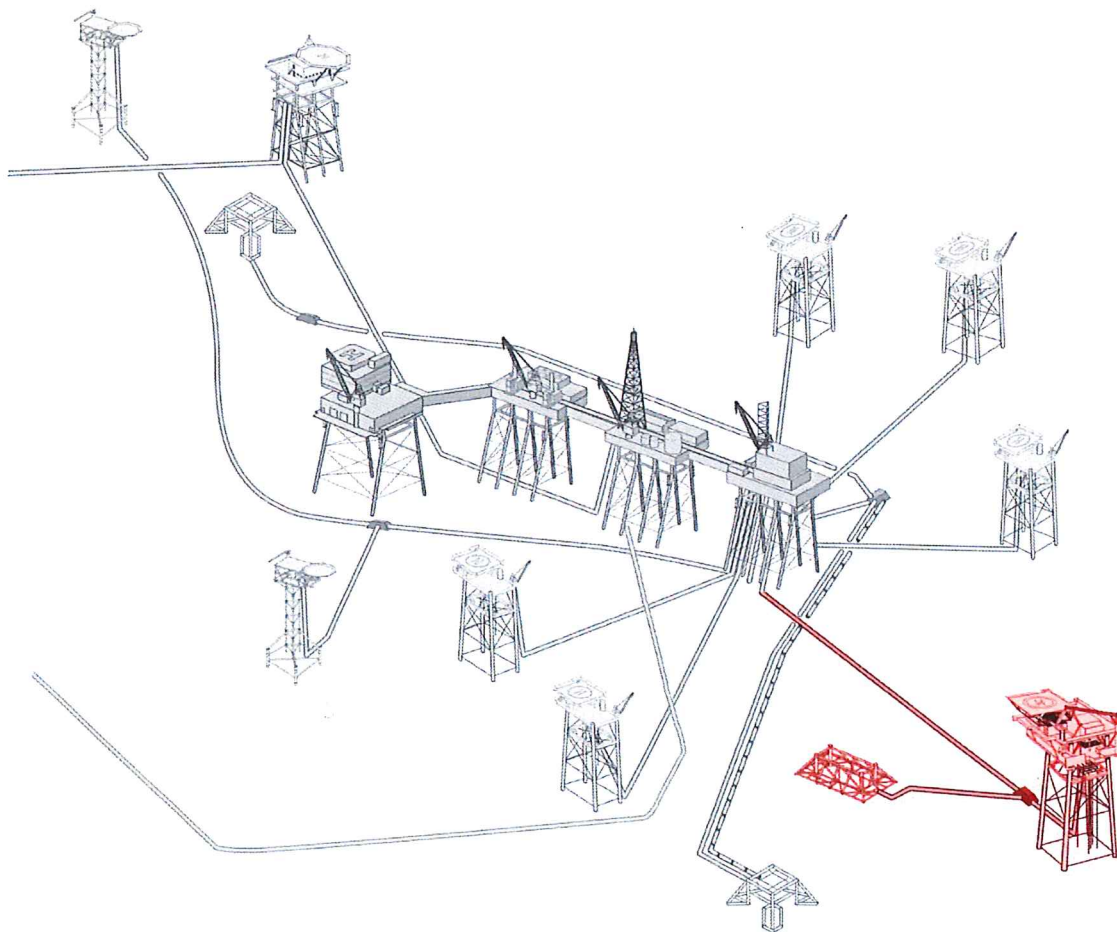


Decommissioning Programmes



Viking Decommissioning Programmes: VDP3

Victor JD and JM Subsea tie back and Associated Infield Pipelines

Document Control

Approvals

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3	COP-SNS-V-XX-X-PM-12-00005	Final for BEIS	09 Jan 2019
4			

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A. Table of Terms and Abbreviations

Abbreviation	Explanation
AR	Viking A Riser Platform
CA	Comparative Assessment
CD	Viking C Satellite Platform
CoP	Cessation of Production
cSAC	Candidate Special Area of Conservation
DD	Viking D Satellite Platform
BEIS	Department for Business, Energy and Industrial Strategy
ED	Viking E Satellite Platform
EIA	Environmental Impact Assessment
EMS	Environmental Management System
ES	Environmental Statement
FD	Viking F Satellite Platform
GD	Viking G Satellite Platform
HD	Viking H Satellite Platform
HLV	Heavy Lift Vessel
KP	Kilometre Point
KPI	Key Performance Indicator
LAT	Lowest Astronomical Tide
LOGGS	Lincolnshire Offshore Gas Gathering System
MeOH	Methanol
NORM	Naturally Occurring Radioactive Material
NUI	Normally Unattended Installation
OGA	Oil and Gas Authority
OGUK	Oil and Gas United Kingdom
P&A	Plug and Abandon
PMT	Project Management Team
PWA	Pipeline Works Authorisation
SAC	Special Area of Conservation
SLV	Shear Leg Vessel
SNS	Southern North Sea
Te	Tonne
TGT	Theddlethorpe Gas Terminal
Tscf	Trillion standard cubic foot
UKCS	United Kingdom Continental Shelf

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None	

1. Executive Summary

1.1 Combined Decommissioning Programmes

This document contains two decommissioning programmes; - the first is for the Victor Installation and the second is for the associated Pipelines.

The Victor facilities to be decommissioned consist of:

- Platform Installations Victor JD
- Subsurface Installation Victor JM
- Victor JM subsea pigging skid
- Inter-field pipelines

1.2 Requirement for Decommissioning Programmes

Installations:

In accordance with the Petroleum Act 1998, ConocoPhillips (U.K.) Limited as Operator and ConocoPhillips (U.K.) Theta Limited as equity owner of the Victor Field and on behalf of the Section 29 notice holders (see Table 1.2 and Section 8) is applying to the Department for Business, Energy and Industrial Strategy (BEIS) to obtain approval for decommissioning of the Victor JD installation and the Victor JM subsea manifold tie-back facilities detailed in Section 2 of this document.

Pipelines:

In accordance with the Petroleum Act 1998, ConocoPhillips (U.K.) Limited as Operator and ConocoPhillips (U.K.) Theta Limited as equity owner of the Victor Field and on behalf of the Section 29 notice holders (see Table 1.4 and Section 8) is applying to BEIS to obtain approval for decommissioning of the Victor JD and JM pipelines and subsea pigging skid detailed in Section 2 of this document.

In conjunction with public, stakeholder and regulatory consultation, the decommissioning programmes are submitted in compliance with national and international regulations and with consideration of BEIS guidelines. The schedule outlined in this document is for a decommissioning project which commenced with the well plugging and abandonment in 2015.

1.3 Introduction

The Victor Field was discovered in 1972 by the 49/22-2 well and is located in the Southern North Sea, approximately 140 km due East of Theddlethorpe on the Lincolnshire coast.

The installations covered by this document are in the following Quad blocks 49/17 and 49/22:

- Victor JM Block 49/22
- Victor JD Block 49/17

Production from the Victor reservoirs commenced in 1984 from a single unmanned installation, Victor JD linked to the Viking Hub complex. Gas export from Victor Field was via the Viking Hub prior to being exported to the Theddlethorpe Gas Terminal (TGT) via a 28" export pipeline. Subsequently export was via LOGGS to TGT from 2009 onwards when the original VTS pipeline was replaced by a new 16" gas export pipeline.

- 1984 Victor JD tied back to the Viking Hub complex
- 1995 Victor JM tied back to the Viking Hub complex via the Victor JD pipeline.

The Victor field covered by these Decommissioning Programmes have produced 1.0 Tscf. Cessation of Production applications were submitted and approved as follows:

Installation	Submission Date	Approval Date
Victor JD and JM	26 th November 2015	21 st December 2015

The Victor JD Platform is a small installation with total combined Topsides and Jacket weights of 1992 tonnes; standing in 38 metres of water. The Victor JM manifold is a small subsea installation in 30 metres of water. Victor JM is tied back to Victor JD, which in turn ties into the Viking B complex by individual buried pipelines. The small size, shallow water depth and design life of the Victor facilities has determined the philosophy of their decommissioning, which will be to:

- Well Plug and Abandon (P&A)
- Remove the satellite platform, subsea installation and tie in tee
- Leave the cleaned pipelines in situ.

1.4 Overview of Installations and Pipelines Being Decommissioned

1.4.1 Installations

Table 1.1 Installations Being Decommissioned			
Field Names		Quad / Block	
Fields	Victor JD and JM	Production Type	Gas / Condensate
Water Depth	30m – 38 m	UKCS block	Quad 49 Blocks 17/22a

Surface Installations			
Number	Type	Topsides Weight (Te)	Jacket Weight (Te)
1	Fixed steel jacket	752	1240

Subsea Installations		Number of Wells	
Number	Type	Number	Type
1	Subsea Manifold	5 1	Platform Subsea

Drill Cuttings Piles		Distance to Median	Distance from nearest UK coastline
Number of Piles	Total Est volume m ³	km	km
0	0	Victor JD 45km	Victor JD 79 km

See Figure 1.1 for further details.

Table 1.2 Installation Section 29 Notice Holders Details		
Section 29 Notice Holders	Registration Number	Equity Interest
ConocoPhillips (U.K.) Theta Limited	01491002	20%
ConocoPhillips (U.K.) Limited (Operator)	00524868	0%
Eso Exploration and Production UK Limited	00207426	25%
Spirit Energy Resources Limited	02855151	30%
Calenergy Gas Limited	04370508	5%
INEOS UK SNS Limited	01021338	10%
Dana Petroleum (E&P) Limited	02294746	10%

1.4.2 Pipelines

Table 1.3 Pipelines Being Decommissioned

Number of Pipelines	5	See Table 2.3
Subsea pigging skid	1	See Table 2.3

Table 1.4 Pipelines Section 29 Notice Holders Details

Section 29 Notice Holders	Registration Number	Equity Interest
ConocoPhillips (U.K.) Theta Limited	01491002	20%
Esso Exploration and Production UK Limited	00207426	25%
Spirit Energy Resources Limited	02855151	30%
Calenergy Gas Limited	04370508	5%
INEOS UK SNS Limited	01021338	10%
Dana Petroleum (E&P) Limited	02294746	10%

1.5 Summary of Proposed Decommissioning Programmes

Table 1.5: Summary of Decommissioning Programmes		
Selected Option	Reason for Selection	Proposed Decommissioning Solution
1. Topsides		
Complete removal, dismantlement and reuse/ recycling and disposal.	Topsides past design life, equipment obsolete and degraded, or recovery no longer economic.	Removed by Heavy Lift Vessel (HLV) transported to appropriate land based facility for dismantlement, recycling and disposal. Equipment that cannot be re-used will be recycled or disposed of as appropriate.
2. Jackets		
Complete removal (3m below seabed), dismantlement and reuse/recycling and disposal.	Meets BEIS regulatory requirements. Jackets past design life.	Removed by HLV, transported to appropriate land based facility for dismantlement, recycling and disposal.
3. Subsea Installations		
Complete removal (3m below seabed), dismantlement and reuse/recycling and disposal.	Meets BEIS regulatory requirements.	Removed by a Construction Support Vessel (CSV), transported to appropriate land based facility for dismantlement, recycling and disposal.
4. Pipelines, Flowlines and Umbilical's		
Pipelines will be flushed and decommissioned in situ. Concrete mattresses and other pipeline stabilisation structures will be decommissioned in situ.	<p>In situ decommissioning with minimum intervention option:</p> <p>All mattresses would be left in situ to maintain pipeline stabilisation.</p> <p>Minimise disturbance of the established environment.</p> <p>Reduce the requirement for the introduction of new material (Rock Dump) to the Special Area of Conservation (SAC).</p>	<p>Mobile hydrocarbons in the pipelines will be flushed prior to subsea disconnection from the satellite.</p> <p>Pipelines would be left open and flooded with seawater with cut ends only to be rock dumped as required to a maximum of 25Te per cut pipeline end</p> <p>Post flushing, the remaining pipeline would be left in its current state, marked on sea charts and notifications issued to fishermen/other users of the sea.</p> <p>Concrete mattresses and other pipeline stabilisation structures will be decommissioned in situ.</p>

Table 1.5: Summary of Decommissioning Programmes

Selected Option	Reason for Selection	Proposed Decommissioning Solution
Complete removal (3m below seabed), dismantlement and reuse/ recycling and disposal of the Victor JM Subsea pigging skid and protection structure that is associated with the Victor pipelines decommissioning programme.	Meets BEIS regulatory requirements.	Removed and transported to appropriate land based facility for dismantlement, recycling and disposal. Concrete mattresses and grout bags required for access will be removed and transported onshore for recycling and disposal.
5. Well Abandonment Operations		
Permanent well Plug and Abandonment (P&A).	Meets OGA regulatory requirements.	Abandonment in accordance with OGA and HSE regulatory requirements.
6. Drill Cuttings		
None required.	No Drill Cuttings Piles have been identified by seabed survey.	None required.
7. Interdependencies		
Platform removal can only occur after Well P&A and Topsides / Pipeline cleaning.		

1.6 Field Location including Field Layout and Adjacent Facilities

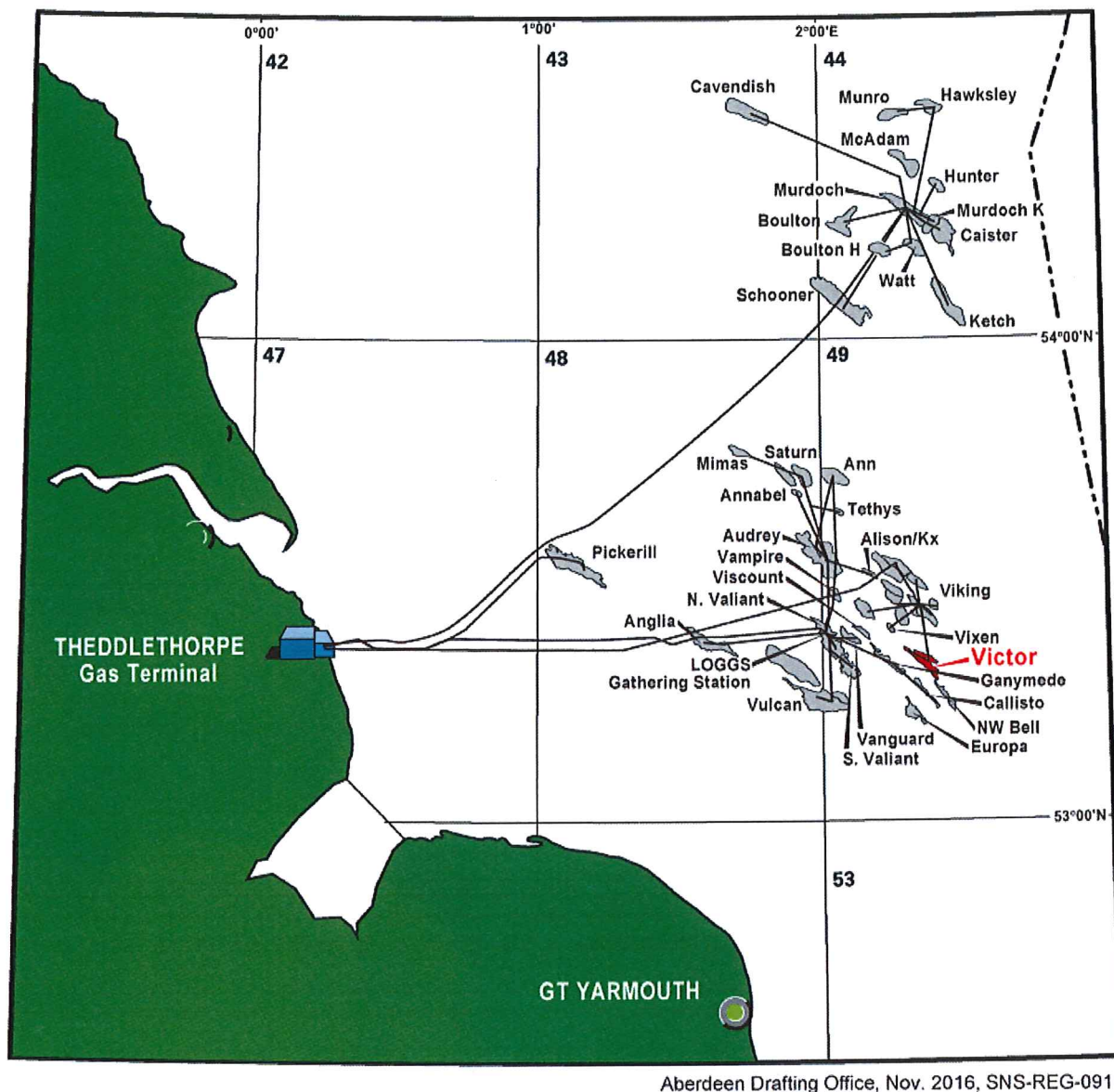


Figure 1.1 – Location of Victor Field in UKCS

The Victor development is part of the ConocoPhillips Southern North Sea (SNS) Gas Operation with the installations and pipelines covered by this decommissioning programme highlighted in the Field Layout Figure 1.2.

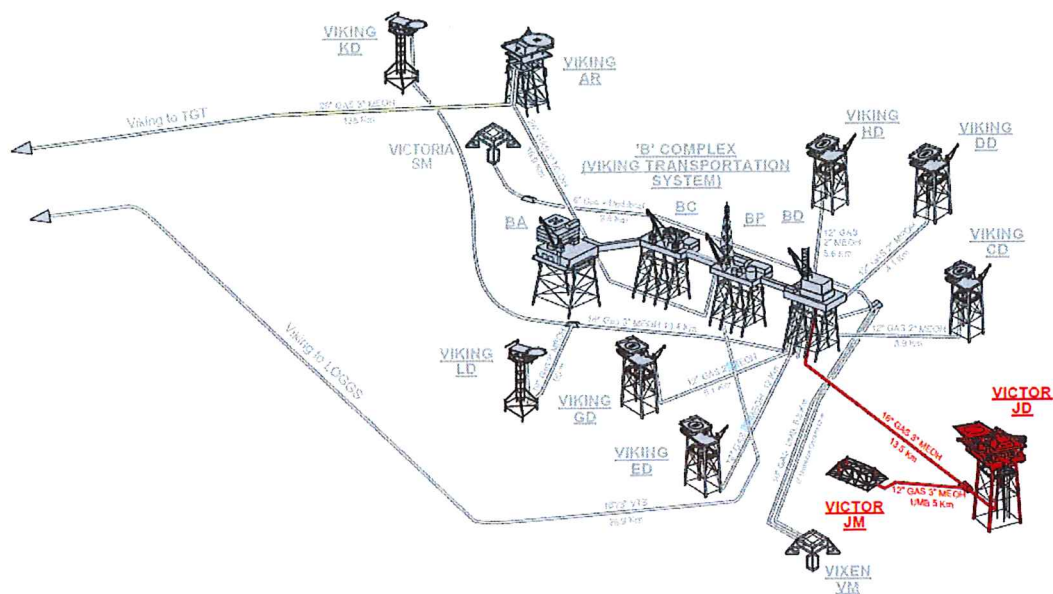


Figure 1.2 – Victor Development Layout

Facilities adjacent to the Victor Facilities that are potentially impacted by this decommissioning programme are listed below in Table 1.6 and highlighted in Figure 1.3.

Table 1.6 List of Adjacent Facilities

Owner	Name	Type	Distance / Direction	Information	Status
Surface Installations					
ConocoPhillips / BP	Viking Bravo Complex	Manned 4 Jacket bridge linked complex	Viking BD: 13.5km NW of Victor JD	Complex transported Victor Gas to TGT for Processing	Cold Stacked
Subsea Manifolds					
ConocoPhillips / BP	Vixen VM	Single well subsea manifold	Vixen VM: 11.6km NW of Victor JD	Subsea manifold connected to Viking BD	Well plugged and abandoned.
Pipelines					
ConocoPhillips / BP	PL89	12" Gas Pipeline	PL89: 10.7km N of Victor JD	Pipeline interconnects Viking CD with Viking BD	Out of use
ConocoPhillips / BP	PL132	2" MeOH Pipeline	PL132: 10.7km N of Victor JD	Piggy backed onto PL89 Pipeline interconnects Viking CD with Viking BD	Out of use
ConocoPhillips / BP	PL91	12" Gas Pipeline	PL91: 13.4km N of Victor JD	Pipeline interconnects Viking ED with Viking BD	Out of use
ConocoPhillips / BP	PL133	2" MeOH Pipeline	PL133: 13.4km N of Victor JD	Piggy backed onto PL91 Pipeline interconnects Viking ED with Viking BD	Out of use
ConocoPhillips / BP	PL1767	10" Gas Pipeline	PL1767: 11.5km NW of Victor JD	Pipeline interconnects Vixen VM with Viking BD Crosses over PL211 & PL212	Out of use
ConocoPhillips / BP	PL1768	Control Umbilical	PL1768: 11.5km NW of Victor JD	Control Umbilical interconnects Vixen VM with Viking BD Crosses over PL211 & PL212	Out of use

Impacts of Decommissioning Proposals

No anticipated impact on adjacent facilities if pipelines are decommissioned in situ. Pipeline crossings under rock placement and mattresses are to be decommissioned in-situ.

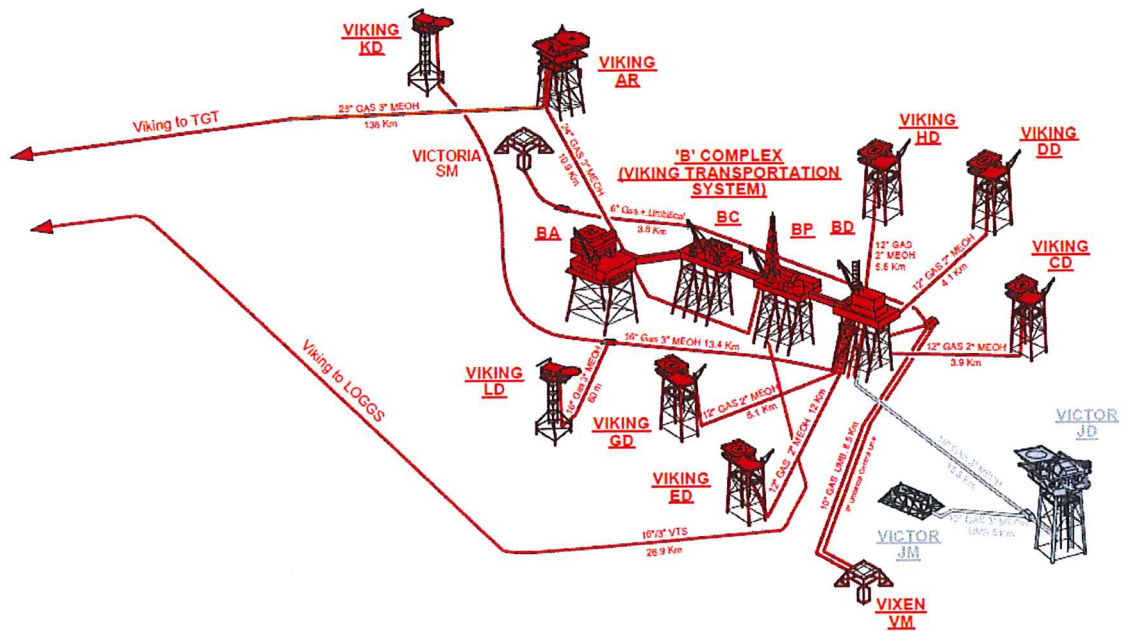


Figure 1.3 - Adjacent Facilities to the Victor Infrastructure (highlighted in Red)

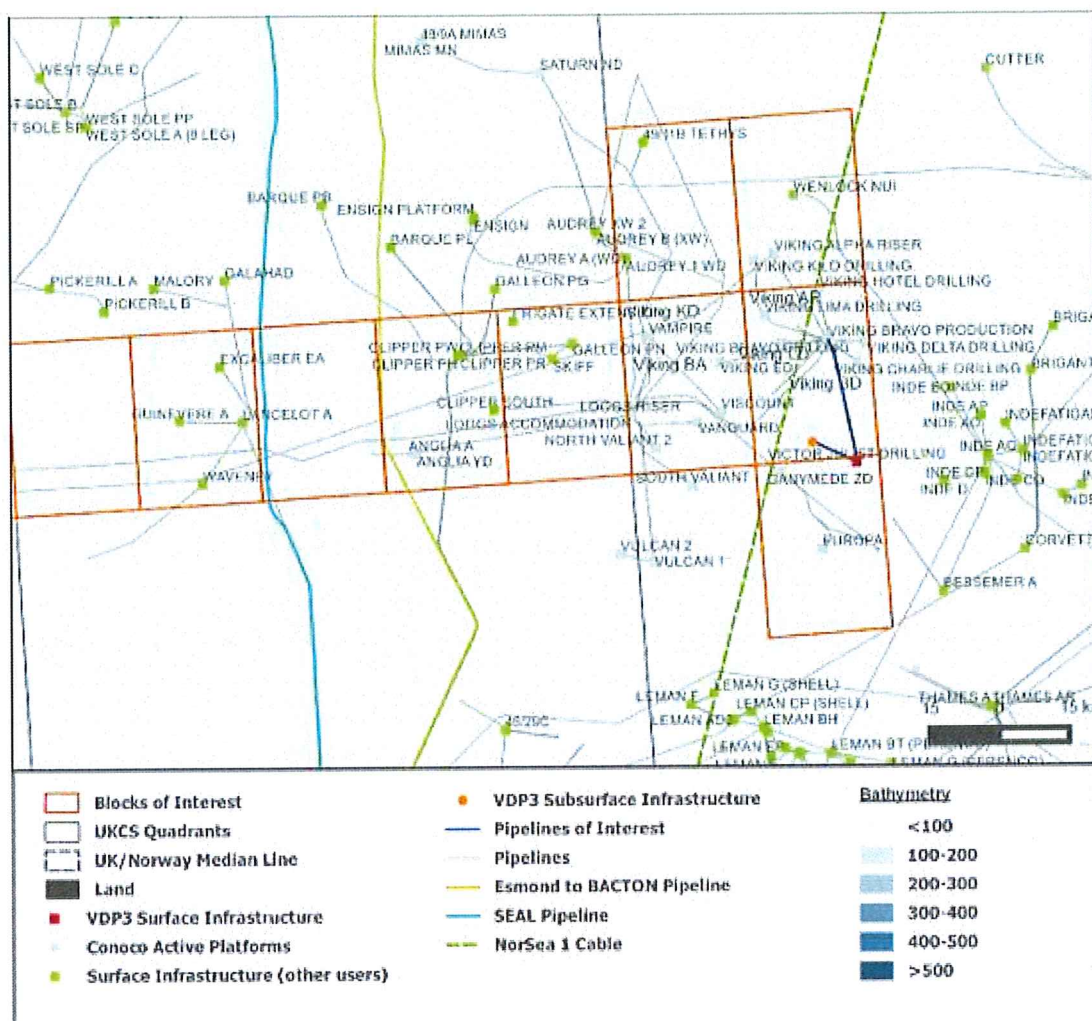


Figure 1.4 – Adjacent Third Party Facilities

1.7 Industrial Implications

Principles of the contracting and procurement strategies to be utilised by ConocoPhillips as operator and on behalf of the other Section 29 notice holders, for the decommissioning of the Victor JD Satellite and Victor JM subsea manifold are listed below:

1. ConocoPhillips participates in the PILOT Share Fair events providing one to one sessions with the UK supply chain on the SNS decommissioning programme and timeline.
2. The First Point Assessment (FPAL) database is the primary source for establishing tender lists for contracts / purchases valued at US\$ 100,000 and above, although it is also used under this limit.
3. ConocoPhillips is committed to competitively bidding all of its major contracts where possible and practicable. We are supporters of the UK Supply Chain Code of Practice and our performance in this regard has been acknowledged through Excellence Awards from Oil & Gas UK.
4. ConocoPhillips are active participants in various industry initiatives including:
 - a. Oil & Gas UK Supply Chain Forum;
 - b. Inventory sharing initiative (Ampelius);
 - c. OGA Decommissioning Board - Supply Chain sub-group.

2. Description of Items to be Decommissioned

2.1 Surface Facilities (Topsides and Jackets)

Table 2.1 Surface Facilities Information								
Name	Facility Type	Location	Topsides / Facilities		Jacket (if applicable)			
		WGS84 Decimal/ WGS84 Decimal Minute	Weight (Te)*	No of modules	Weight (Te)**	No of Legs	No of piles	Weight of piles (Te)***
VICTOR JD	Fixed steel jacket	53.3268° N / 53° 19.647' N 02.3623° E / 02° 21.738' E	752	1	1240	4	4	498 below mudline

Note* Weights are based on structural designs and review of the Return to Scene (R2S) footage

Note** Weights are based on design drawings, include piles to mudline, (excludes marine growth)

Note *** Weight of pile from mudline to -3m 25 Te



Figure 2.1.1 Photograph of Victor JD Block 49/22

2.2 Subsea Installations and Stabilisation Features

Table 2.2 Subsea Installation and Stabilisation Features				
Subsea installations and stabilisation features	Number	Size / Weight (Te)	Locations	Comments / Status
			WGS84 Decimal/ WGS84 Decimal Minute	
Wellheads	1	167" x 37.3" / 3.5Te Xmas Tree is on top of wellhead and weighs 15Te	53.35013° N / 53° 21.008' N 02.2937° E / 02° 17.642' E	Disused
Manifolds*	1	74	53.35013° N / 53° 21.008' N 02.2937° E / 02° 17.642' E	Disused
Templates	0	0	None	None present
Protection frames*	1	0	53.35013° N / 53° 21.008' N 02.2937° E / 02° 17.642' E	Disused
SSIV	0	0	None	None present
Concrete mattresses	0	0	None	None present
Grout bags	0	0	None	None present
Formwork	0	0	None	None present
Froned mats	0	0	None	None present
Rock dump	0	0	None	None present
Other	0	0	None	None present

*Note** Manifold is integral to the Protection frame



Figure 2.2.1 Photograph of Victor JM Manifold and Protection frame

2.3 Pipelines Including Stabilisation Features

Table 2.3 Pipeline / Flowline / Umbilical Information									
Description	Pipeline No (as per PWA)	Diameter (inches)	Length (km)	Description of Component Parts	Product Conveyed	From – To End Points	Burial Status	Pipeline Status	Current Content
Gas Pipeline	PL211	16	13.5	Steel with concrete and coal tar coatings	Gas condensate, produced water	Victor JD to Viking BD	Trenched and buried, 169m exposed (1.3%), no reportable spans**	Out of Service	Untreated seawater with Oil in Water of <30mg/l
MeOH Pipeline piggy backed onto PL211	PL212	3	13.5	Steel with fusion bonded epoxy coatings	MeOH, corrosion inhibitor	Viking BD to Victor JD	Trenched and buried, 169m exposed (1.3%)*, no reportable span**	Out of Service	Untreated seawater
Gas Pipeline	PL1095	12	5.1	Steel with concrete and coal tar coatings	Gas condensate, produced water	Victor JM to Victor JD Piggig Skid	Trenched and buried, 63m exposed (1.2%), no reportable spans**	Out of Service	Untreated seawater with Oil in Water of <30mg/l
MeOH Pipeline	PL1096	3	5.1	Steel with fusion bonded epoxy coatings	MeOH, corrosion inhibitor	Victor JD to Victor JM	Trenched and buried, 63m exposed (1.2%)*, no reportable spans**	Out of Service	Untreated seawater
Control Umbilical	PLU4039	4	5.4	Polypropylene	Control Fluids	Victor JD to Victor JM	Trenched and buried, 0m exposed (0.0%), no reportable spans**	Out of Service	Untreated seawater
Victor JM Subsea piggig skid	N/A	N/A	N/A	11.5Te subsea piggig skid and protection frame that will be removed to gain access to the subsea tee	Gas, Condensate, produced water	Location: 53.3277°N/ 53°19.6622'N 2.3622°E/ 2°21.7290'E	Exposed above the seabed	N/A	Untreated seawater with Oil in Water of <30mg/l

*Note ** Gas pipeline exposure length

*Note *** As per FishSAFE requirements excluding closing spans

*Note **** Average weight of grout bag estimated at 40kg

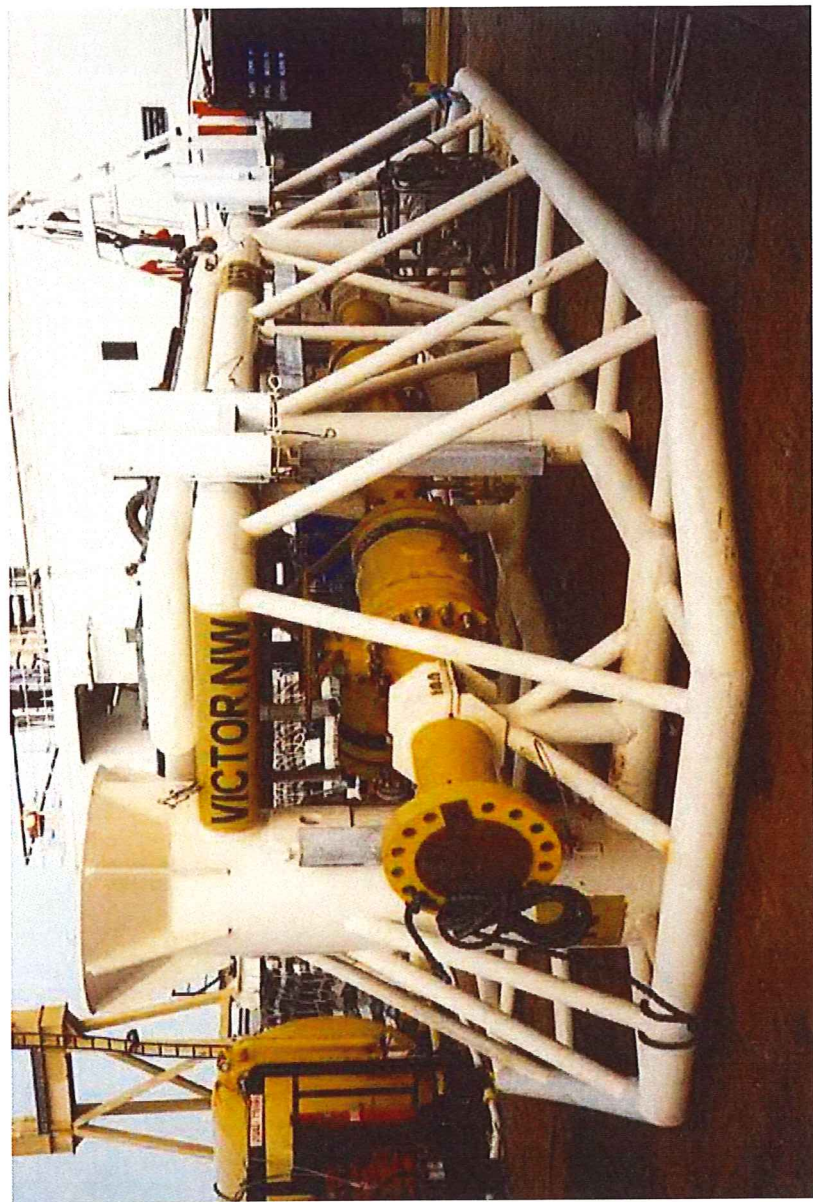


Figure 2.3.1 Photograph of Victor JM subsea pigging skid (formerly Victor NW)

Table 2.4 Subsea Pipeline Stabilisation Features

Stabilisation Feature	Total Number/Length*	Weight (Te)*	Locations**	Exposed / Buried / Condition
Concrete mattresses	1	6	PL211 & PL212 at	Exposed during 2014
	34	204	PL1095, PL1096 & PLU4039 at KP-0.043 – KP-0.041	Exposed during 2014
			KP-0.037 – KP0.034	Exposed during 2014
			KP5.139 – KP5.149	Exposed during 2014
			KP5.154 – KP5.167	Exposed during 2014
			KP5.179 – KP5.191	Exposed during 2014
Grout bags	1m	-	PL211 & PL212 at	Exposed during 2014
	10m		KP0.008 – KP0.009	Exposed during 2014
	2m		KP13.457 – KP13.467	Exposed during 2014
			KP13.485 – KP13.487	Exposed during 2014
Formwork	None	-	-	-
Frond mats	1	6	PL1095, PL1096 & PLU4039 at KP-0.042 – KP-0.041	Exposed during 2014
Rock Dump	8m		PL211 & PL212 at	Partially buried during 2014
	54m		KP0.054 – KP0.062	Partially buried during 2013
	19m		KP12.692 – KP12.747	Partially buried during 2014
	101m		KP13.381 – KP13.400	Partially buried during 2014
	14m		PL1095, PL1096 & PLU4039 at KP0.034 – KP0.135	Partially buried during 2014
	8m		KP4.830 – KP4.844	Partially buried during 2014
	11m		KP4.851 – KP4.859	Partially buried during 2014
	12m		KP4.862 – KP4.873	Partially buried during 2014
			KP4.932 – KP4.944	Partially buried during 2014
	156m		KP4.969 – KP5.125	Partially buried during 2014
Bitumen / grout mattresses	5	30	PL211 & PL212 at	Exposed during 2014
			KP13.437 – KP13.441	Exposed during 2014
			KP13.462 – KP13.466	Exposed during 2014
Other			KP13.476 – KP13.478	Exposed during 2014

Note * The total number and weight for Mattresses have been estimated from the visual survey data and based on a typical mattress size of 6m by 3m and weight of 6 Te. Grout bag and Rock Dump have also been estimated from visual survey data.

2.4 Wells

Table 2.5 Well Information			
JD Platform Wells	Designation	Status	Category of Well
GB_049_22_4A	Gas Production	Suspended. Conductor remains 11ft above mud line.*	PL 3-3-3
GB_049_22_J2	Gas Production	P&A	PL 3-3-3
GB_049_22_J3Z	Gas Production	P&A	PL 3-3-3
GB_049_22_J5	Gas Production	P&A	PL 3-3-3
GB_049_22_J6	Gas Production	P&A	PL 3-3-3
JM Subsea Wells	Designation	Status	Category of Well
GB_049_17_11	Gas Production	Shut-in	SS 3-3-3

*Note** Conductor will be removed during decommissioning and 500m zone will be subject to an overtrawl trial post platform removal

For further details of well categorisation see Oil and Gas UK guidelines for the Suspension or Abandonment of Wells –Issue 4 –July 2012.

2.5 Drill Cuttings

Table 2.6 Drill Cuttings Pile Information

Location of Pile Centre (Latitude / Longitude)	Seabed area (m ²)	Estimated volume of cuttings (m ³)
None of the facilities has a cuttings pile present	0	0

A 2013 Fugro survey (Fugro 2013c) found no evidence of cuttings piles from around the Victor area covered by these decommissioning programmes. The dynamic marine environment has resulted in the redistribution of drill cuttings.

2.6 Inventory Estimates

Table 2.7 Current Installation Material Functional Category Summary

Installation	Haz Mat / NORM Te	Concrete Te	Ferrous Metal Te	Non- Ferrous Metal Te	Plastics Te	Other Non-Haz Te*	Total Te
Victor JD	65	166	1720	10	0	31	1992
Victor JM	0	0	74	0	0	0	74
Total	65	166	1794	10	0	31	2066

*Note** Weights exclude the marine growth associated with all assets

Table 2.8 Pipeline and Mattress Material Functional Category Summary							
Installation	Description	Haz Mat / NORM	Concrete	Ferrous Metal	Non- Ferrous Metal	Plastics	Other Non-Haz
		Te	Te	Te	Te	Te	Te*
PL211	Victor JD to Viking BD Gas	167	2911	2262	0	0	0
PL212	Viking BD to Victor JD Methanol	2	0	320	0	0	0
PL1095	Victor JM to JD Pigging Skid Gas	47	921	636	0	0	0
PL1096	Victor JD to Victor JM Methanol	0.3	0	118	0	0	0
PLU4039	Victor JD to Victor JM Umbilical	0	0	69	3	25	0
	Victor JM subsea pigging skid	0	0	11.5	0	0	0
Mattresses	-	0	210	0	0	0	0
TOTAL		216	4042	3417	3	25	0

Note* Weights exclude marine growth

3. Removal and Disposal Methods

In line with the waste hierarchy, the re-use of an installation (or parts thereof) is first in the order of preferred decommissioning options considered.

Options considered for re-use of the Victor Facilities' were:

- Further Hydrocarbon production from development local to the satellites
- Relocation elsewhere to produce hydrocarbons
- Sale for reuse to others

No economic hydrocarbon developments local to any of the Victor Facilities were identified. The Victor Facilities are past their design life, require refurbishment and contain obsolete control systems and components. Their re-use is uneconomic.

The selected option for the Victor Facilities is to remove, dismantle and dispose of them, ensuring a high level of material recycling.

3.1 Topsides

3.1.1. Topsides Descriptions

Victor JD

The Victor JD topsides are a minimal facility designed for use as a NUI which extends 38m above Lowest Astronomical Tide (LAT). The Topsides weigh 795 Te have a deck size of 24m by 25 m and comprise of a wellbay, local equipment room, diesel power generation, pedestal crane and helideck.

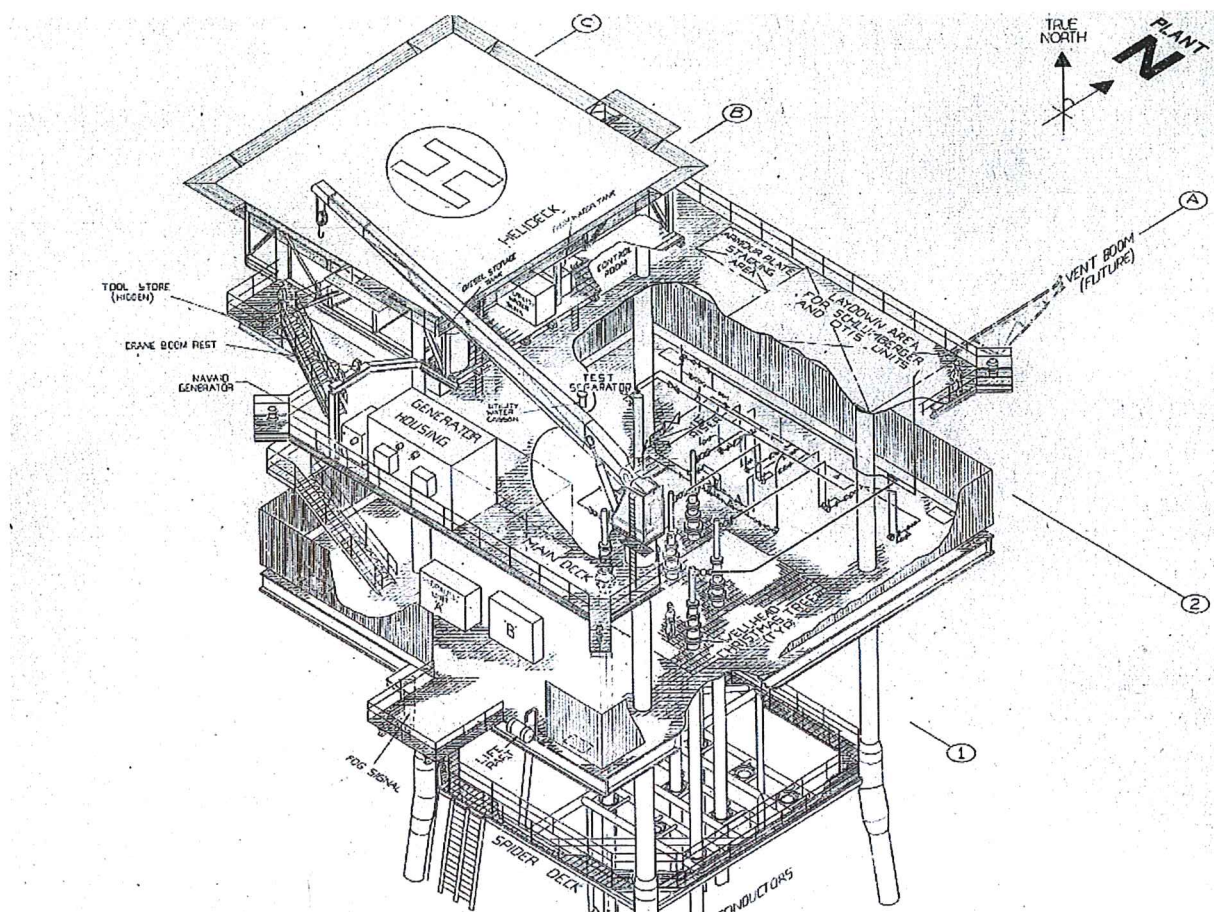


Figure 3.1.1 JD Topsides

Preparation / Cleaning: Table 3.1 describes the methods that will be used to flush, purge and clean the topsides offshore, prior to removal to shore.

Table 3.1 Cleaning of Topsides for Removal		
Waste Type	Composition of Waste	Disposal Route
Hydrocarbons	Process fluids	Has been flushed, Nitrogen purged and vented
Produced solids	Sand, NORM	Produced solids will be removed and disposed of during the dismantlement of the Topsides onshore.
Diesel	Bunkered Diesel fuel	Bunkered Diesel has been drained and returned onshore for re-use or disposal.
Lubricating oils	Lubricants for equipment e.g. gearboxes, pumps, pedestal crane compressor skid	Lubricating oils has been drained and returned onshore for re-use or disposal.

3.1.2 Removal Methods

Given the size and weight of the topsides and jacket it is likely that the removal will be modular in nature for the topsides and jacket.

Table 3.2 Topsides Removal Methods	
<input checked="" type="checkbox"/> 1) HLV (semi-submersible crane vessel) <input checked="" type="checkbox"/> 2) Monohull crane vessel <input checked="" type="checkbox"/> 3) SLV <input checked="" type="checkbox"/> 4) Piece small <input checked="" type="checkbox"/> 5) Other Simultaneous removal of Topsides with Jacket	
Methods Considered	Description
Single lift removal complete with Jacket by HLV / Monohull crane vessel / SLV	Removal of Topsides complete with Jacket in a single lift and transportation to shore for dismantlement, disposal and recycling.
Modular lift removal of Topsides by HLV / Monohull crane vessel / SLV	Removal of Topsides for transportation to shore for dismantlement, disposal and recycling.
Offshore removal "piece small" for onshore disposal	Removal of Topsides and dismantlement offshore for transportation onshore for disposal and recycling.
Proposed removal method and disposal route.	Removal of Topsides Victor JD topsides will be removed using multiple lifts (Helideck, Topsides) Transportation to shore for dismantlement, disposal and recycling Trans-frontier shipments of waste will not be required

Note: ☒ Option Considered in Comparative Assessment

3.2 Jacket

The Victor JD Jacket is a single jacket with 4 legs.

3.2.1 Jacket Decommissioning Overview

The Victor JD Jacket will be removed to 3m below the seabed. The satellite topsides will be removed separately.

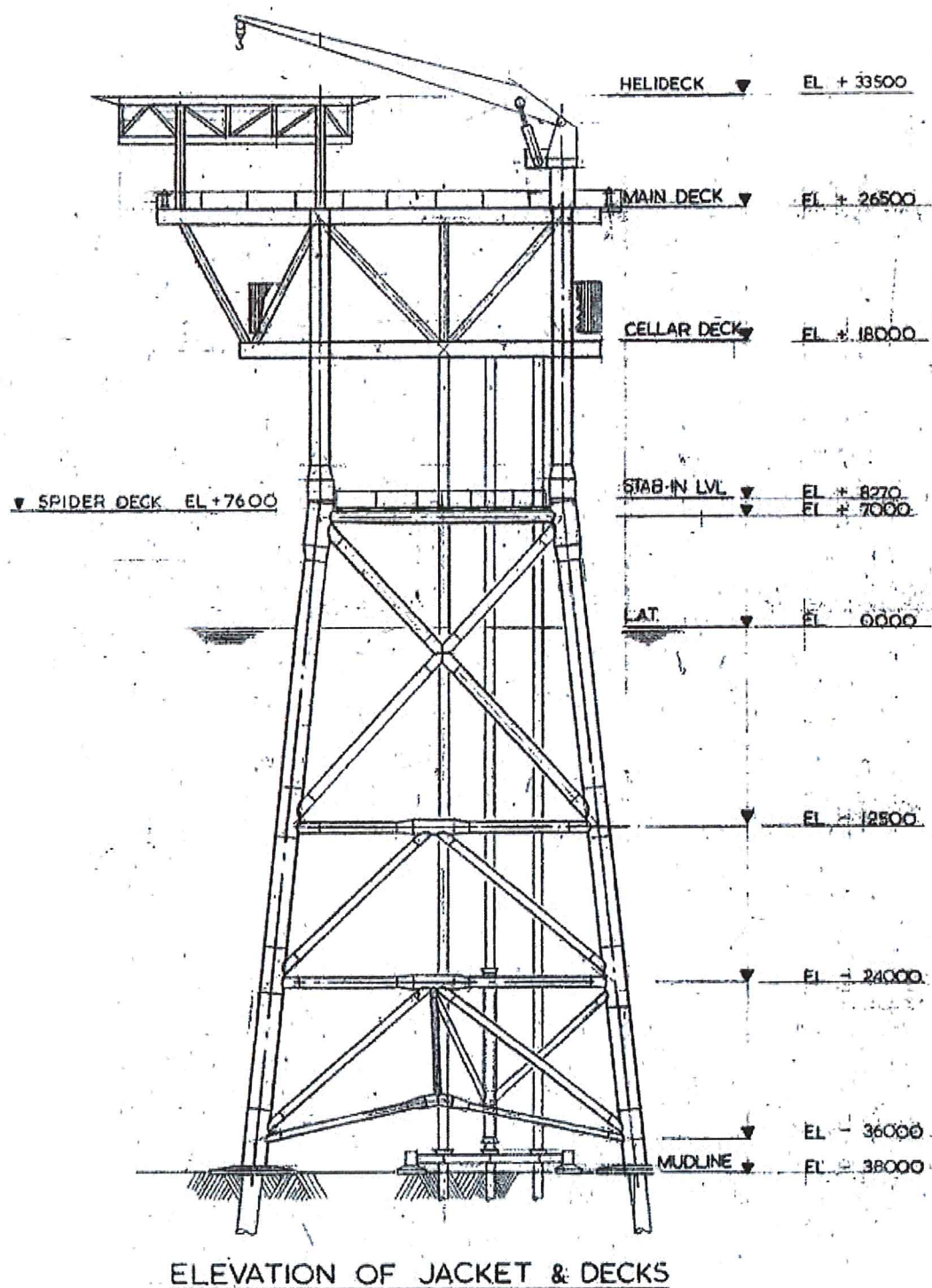


Figure 3.2.1 Victor JD Jacket Elevation

3.2.2 Jacket Removal Methods

Table 3.3 Jacket Removal Methods	
<input checked="" type="checkbox"/> 1) HLV (semi-submersible crane vessel) <input checked="" type="checkbox"/> 2) Monohull crane vessel <input checked="" type="checkbox"/> 3) SLV <input checked="" type="checkbox"/> 4) Piece small <input checked="" type="checkbox"/> 5) Other Simultaneous removal of Topsides with Jacket	
Method	Description
Jacket Piles cut 3m below seabed and removed via single lift complete with Topsides by HLV / Monohull crane vessel / SLV	Jacket Piles cut 3m below seabed. Removal of Jacket complete with Topsides in a single lift and transportation to shore for dismantlement, disposal and recycling.
Jacket Piles cut 3m below seabed and removed via single lift by HLV / Monohull crane vessel / SLV	Jacket Piles cut 3m below seabed. Removal of Jacket in a single lift and transportation to shore for dismantlement, disposal and recycling.
Offshore removal "piece small" for onshore disposal	Jacket Piles cut 3m below seabed. Removal of Jacket and dismantlement offshore for transportation onshore for disposal and recycling.
Proposed removal method and disposal route.	Jacket Piles cut 3m below seabed. Removal of Jacket and topsides will be separate lifts Transportation to shore for dismantlement, disposal and recycling. Trans-frontier shipments of waste will not be required

Note: ☒ Option Considered in Comparative Assessment

3.3 Subsea Installations and Stabilisation Features

Table 3.4 Subsea Installations and Stabilisation features			
Subsea installations and stabilisation features	Number	Option	Disposal Route
Wellheads	1	Full Removal	Removed and transported to appropriate land based facility for dismantlement, recycling and disposal.
Manifolds*	1	Complete removal (3 metres below the seabed)	Removed and transported to appropriate land based facility for dismantlement, recycling and disposal.
Templates	0	None	None
Protection frames	1	Full Removal	Removed and transported to appropriate land based facility for dismantlement, recycling and disposal.
SSIV	0	None	None
Concrete mattresses	0	None	None
Grout bags	0	None	None
Formwork	0	None	None
Froned mats	0	None	None
Rock dump	0	None	None
Other	0	None	None

*Note** Manifold is integral to the Protection frame

3.4 Pipelines

3.4.1 Pipeline Decommissioning Options

In recognition of the environmental sensitivities in the area where pipeline decommissioning will take place, supplementary information in support of the Comparative Assessment and associated information within this Decommissioning Programme has been provided to BEIS. This information comprises pipeline as-laid status, trends in pipeline exposure, trends in pipeline burial depth and pipeline location in relation to sandbank features.

Table 3.5: Pipeline or Pipeline Groups / Decommissioning Options			
Pipeline or Group (as per PWA)	Condition of line / group	Whole or part of pipeline / group	Decommissioning Options considered*
PL211, PL212, PL1095, PL1096 and PLU4039	Trenched, Buried, Spanning	Pipelines will be disconnected on seabed at satellite end to facilitate satellite removal and on either side of the manifold and subsea pigging skid to facilitate subsea manifold and pigging skid removal. Pipelines at Viking B Complex end will be disconnected on the seabed to facilitate the removal of the Viking B complex.	1, 2, 4, 5, 6, 7, 8, 9
Victor JM subsea pigging skid	Installed on seabed	Subsea pigging skid to be removed to shore	Full Removal

* Key to Options:

- | | | |
|-----------------------------|---------------------------|-----------------------|
| 1) Remove – reverse reeling | 2) Remove – Reverse S lay | 3) Trench and bury |
| 4) Remedial removal | 5) Remedial trenching | 6) Partial Removal |
| 7) Leave in place | 8) Other ** | 9) Remedial rock-dump |

** Float and Tow i.e. expose pipelines and add buoyancy so that they can be floated and towed ashore for disposal and recycling

3.4.2 Comparative Assessment Method

A two phase process was used comprising of multidisciplinary workshops followed by the assessment compilation and option selection. The purpose of the comparative assessment was to identify the best overall option for decommissioning of each of the five pipelines included within the scope of the decommissioning programme in view of the pipeline status, condition and environmental setting.

The independently chaired workshops comprised of an assessment of the technical feasibility and risk of major operations failure for all identified decommissioning options for the associated pipelines.

Initially 9 decommissioning options were identified and considered by ConocoPhillips for assessment of technical feasibility of the decommissioning of the infield pipelines. These included:

- | | |
|--------------------------------------|------------------------------------|
| ○ Leave in situ minimum intervention | ○ Leave in situ minor intervention |
| ○ Partial removal reverse lay | ○ Partial removal reverse reel |
| ○ Partial removal cut and lift | ○ Full removal reverse lay |
| ○ Full removal reverse reel | ○ Full removal cut and lift |
| ○ Full removal float and tow | |

Note:

Leave in Situ Minimum Intervention entails: Post flushing, the remaining pipeline would be left in its current state, marked on sea charts and notifications issued to fishermen / other users of the sea. All mattresses would be left in situ in their current state to maintain pipeline stabilisation, minimise disturbance of the established environment and reduce the requirement for the introduction of new material to the SCI. Pipelines would be left open and flooded with seawater.

Leave in Situ Minor Intervention entails: Post flushing, the pipelines decommissioned in situ would be left in such a manner that they do not pose a risk to other users of the sea. Reasonable attempts to remove all mattresses would be undertaken where safe to do so. Pipelines would be left open and flooded with seawater.

The decommissioning options deemed to be technically feasible were carried forwards through the comparative assessment process and compared in terms of pre-defined selection criteria namely safety, environmental impacts, energy and atmospheric emissions, socio-economic impacts and cost.

Based on technical feasibility and the risk of major operations failure, the decommissioning options progressed to the second phase of the comparative assessment were reduced to six options comprising;

- | | |
|--------------------------------------|------------------------------------|
| ○ Leave in situ minimum intervention | ○ Leave in situ minor intervention |
| ○ Partial removal cut and lift | ○ Full removal reverse lay |
| ○ Full removal reverse reel | ○ Full removal cut and lift |

Table 3.6: Outcomes of Comparative Assessment		
Pipeline or Group	Recommended Option*	Justification
PL211, PL212, PL1095, PL1096 and PLU4039	Option 7 Leave in place	Pipelines and mattresses were subject to a formal comparative assessment which concluded that in situ decommissioning with minimum intervention was the preferred option. Rock-placement (max. 25Te per cut pipeline end) on the cut pipeline ends only.
Victor JM subsea pigging skid	Full Removal	Subsea pigging skid was not subject to the CA process. The subsea pigging skid is to be removed to shore.

*Key to Options:

- | | | |
|-----------------------------|---------------------------|-----------------------|
| 1) Remove – reverse reeling | 2) Remove – Reverse S lay | 3) Trench and bury |
| 4) Remedial removal | 5) Remedial trenching | 6) Partial Removal |
| 7) Leave in place | 8) Other** | 9) Remedial rock-dump |

** Float and Tow i.e. expose pipelines and add buoyancy so that they can be floated and towed ashore for disposal and recycling

ConocoPhillips have risk assessed and understand the risk and consequences of decommissioning pipelines in situ.

3.5 Pipeline Stabilisation Features

Table 3.7 Pipeline Stabilisation features			
Stabilisation features	Number	Option	Disposal Route
Concrete mattresses	35	Pipelines and mattresses were subject to a formal comparative assessment which concluded that in situ decommissioning with minimum intervention was the preferred option	None required*
Grout bags	13m length	Pipelines and mattresses were subject to a formal comparative assessment which concluded that in situ decommissioning with minimum intervention was the preferred option	None required*
Formwork	None	NA	NA
Froned mats	1	Pipelines and mattresses were subject to a formal comparative assessment which concluded that in situ decommissioning with minimum intervention was the preferred option	None required*

Table 3.7 Pipeline Stabilisation features			
Stabilisation features	Number	Option	Disposal Route
Rock placement	383m length	Pipelines and mattresses were subject to a formal comparative assessment which concluded that in situ decommissioning with minimum intervention was the preferred option	None required*
Bitumen/ Grout mattresses	5	Pipelines and mattresses were subject to a formal comparative assessment which concluded that in situ decommissioning with minimum intervention was the preferred option	None required*
Other			

Note Leave in situ*

3.6 Wells

Table 3.8: Well Plug and Abandonment
<p>The 5 Victor JD wells have been plugged and abandoned by the Ensco 92 Jack up Mobile Offshore Drilling Unit in a 115 day programme of work, which commenced in June 2016.</p> <p>The Victor JM well which requires to be abandoned, as listed in Section 2.4 (Table 2.5) will be plugged and abandoned in accordance with OGUK Guidelines for the suspension and abandonment of wells.</p> <p>A Master Application Template (MAT) and the supporting Subsidiary Application Templates (SATs) have been submitted in support of all well plug and abandonment activities.</p>

3.7 Drill Cuttings

3.7.1 Drill Cuttings Decommissioning Options

Not applicable, a 2013 Fugro survey (Fugro 2013c) found no evidence of cuttings piles from around the Victor facilities covered by this decommissioning programme.

3.8 Waste Streams

Table 3.9 Waste Stream Management Methods

Waste Stream	Removal and Disposal method
Bulk liquids	Pipeline flushing fluids will be injected into redundant gas production wells. Bulk liquids removed from vessels and transported to shore. Vessels and pipework will be drained prior to removal to shore and shipped in accordance with maritime transportation guidelines. Bulk fluids taken onshore for handling at the appropriately permitted facilities prior to onshore treatment and disposal.
Marine growth	To be taken onshore with the infrastructure identified for removal for handling at the appropriately permitted disposal yard prior to onshore disposal.
NORM	To be taken onshore with the infrastructure identified for removal and decontamination at the appropriately permitted disposal yard prior to onshore disposal. NORM not removed as part of pipeline cleaning will be left in situ and is considered to have a negligible impact on the receiving marine environment (ES Section 11).
Asbestos	To be taken onshore with the infrastructure identified for removal for handling at the appropriately permitted disposal yard prior to onshore disposal.
Other hazardous wastes	To be taken onshore with the infrastructure identified for removal for handling at the appropriately permitted disposal yard prior to onshore disposal.
Onshore Dismantling sites	Appropriately permitted sites selected through the ConocoPhillips procurement process considering the suitability of the facility, systems in place for the safe and efficient segregation and storage of waste in accordance with operational site permits, proven materials re-use and recycling performance including the use of innovative materials management practices to minimise the quantity of materials disposed of. Trans-frontier shipment of waste will not be required.

Table 3.10 Inventory Disposition

	Total inventory Tonnage	Planned Tonnage to shore*	Planned Tonnage Decommissioned in situ
Installations	2066	1568	498 (Below Mudline)
Pipelines	7493	0	7493
Mattresses	210	0	210

Note Excludes 142Te marine growth associated with the installation jackets and weight*

It is not currently possible to predict the market for re-usable materials with confidence. However, there is a target that >95% of the materials will be recycled.

In accordance with the ConocoPhillips Corporate Waste Management Standard, all facilities receiving waste are to be approved by the Company prior to use. Approval requires a favourable assessment of a waste facility's ability to avoid environmental harm through protective designs, operations, monitoring, financial integrity and institutional controls. Post approval, the facility will be audited to confirm operations are undertaken within the conditions of associated site permits and to confirm its ongoing suitability for continued use and to identify opportunities for improvement.

ConocoPhillips will collaborate with the operator of the waste facility to communicate the proposed consignment of the waste to the local regulatory authority in accordance with the site permits.

4. Environmental Impact Assessment

4.1 Environmental Sensitivities (Summary)

Table 4.1: Environmental Sensitivities	
Environmental Receptor	Main Features
Conservation interests	<p>Special Areas of Conservation (SAC), Sites of Community Interest (SCI) and Candidate SACs (cSACs)</p> <p>The VDP3 decommissioning areas are located within the following SACs and cSAC (ES Section 4.3):</p> <ul style="list-style-type: none"> • The North Norfolk Sandbanks and Saturn Reef SAC designated for the Annex I sandbanks that are slightly covered by water all the time and Sabellaria spinulosa biogenic reef habitats. Annex I habitats sandbanks occurring within this SAC radiate northeast parallel to the Norfolk coast. The sandbanks typically have fields of sand waves associated with them, the amplitude of which decreases with distance from the shore. • Southern North Sea cSAC identified as an area of importance for harbour porpoise (Phocoena phocena) populations. <p>Marine Conservation Zones (MCZs)</p> <p>There are no designated, proposed or recommended MCZs located within the VDP2 decommissioning area (ES Section 4.3).</p>
Seabed	<p>The seabed in the vicinity of the Victor infrastructure comprises of ripples and sand formations. The sediments comprise of fine to coarse sands, often silty with variable amounts of shell fragments and occasional pebbles and cobbles. The highly dynamic marine environment restricts the silt and clay content to less than 15% (Fugro, 2013a) (ES Section 4.1.2). There is no evidence of bedrock, pockmarks or unusual or irregular bedforms.</p> <p>Dominant taxa are typical of the mobile sands and coarser sediments present across the decommissioning area.</p> <p>There is a high probability of Sabellaria spinulosa across the region. There was evidence in the Fugro (2013a) report of small patches of Sabellaria spinulosa aggregations in the Victor area. However, this was sparse and fragmented. The spatial extent of aggregations was limited and they were not elevated above the seabed and do not fit the criteria to be considered as Sabellaria spinulosa reef (ES Section 4.2.1).</p>
Fish	<p>The Victor infrastructure is located within the spawning grounds of mackerel, cod, whiting, plaice, lemon sole, sole, sandeel, sprat and Nephrops.</p>

Table 4.1: Environmental Sensitivities

Environmental Receptor	Main Features
	<p>The plaice spawning area within the vicinity of the decommissioning infrastructure is considered to be part of an important spawning area for the species, with a relative high intensity spawning recorded from the International Council for the Exploration of the sea (ICES) fish survey data.</p> <p>The infrastructure also lies within the nursery grounds for anglerfish, spurdog, thornback ray, mackerel, herring, cod, haddock, whiting, plaice, lemon, sole, sandeel, Nephrops, tope shark, Norway pout, sprat and horse mackerel.</p> <p>Data suggests the probable presence of Age 0 group fish defined as fish in the first year of their lives or those than can be classified as juveniles (ES Section 4.2.2).</p>
Fisheries	<p>Fishing activity in the Victor area is described as moderate to low. The Victor installations are primarily located in the International Council for the Exploration of the sea (ICES) rectangles 35F2 and 36F2, while the export pipelines PL27 and PL161 are located in the four rectangles (35F0, 35F1, 35F2 and 36F2).</p> <p>There are 11 different methods of commercial fishing recorded from these ICES rectangles. In the offshore Victor area commercial fishing is mainly from demersal and beam trawlers. Vessel Monitoring Satellite data indicates a geographical split in terms of fishing types along the export pipelines with fishing grounds targeted by potters (creel vessels) from the shore to approximately 65 km and primarily demersal and beam trawlers beyond the 65 km distance.</p> <p>Within a 50km radius of the offshore Victor infrastructure, fishing vessels are mainly from the Netherlands comprising of beam trawlers fishing for demersal species including plaice. However, there is a shift to electric beam trawl gear which requires a clean seabed; as a result, fewer vessels are fishing near the current infrastructure (ES Section 5.1).</p>
Marine Mammals	<p>The main cetacean species occurring in the Victor area include white-beaked dolphin, white-sided dolphin and harbour porpoise. Additional species observed in the surrounding area include minke whale, long-finned pilot whale, bottlenose dolphin and common dolphin.</p> <p>Pinnipeds sighted in the area include grey seals and harbour or common seals. Grey seals may travel past the infrastructure towards foraging grounds, but densities generally reduce with distance offshore. Harbour seals are more likely to be sighted further offshore; travelling to this area from haul-out sites in The Wash to forage for food (ES Section 4.2.4).</p>
Birds	<p>Seabirds found in the offshore North Sea waters include fulmars, gannets, auk, gulls and terns, while coastal regions accommodate their breeding colonies. The Norfolk coast accommodates one of the most important breeding areas for waders, featuring estuarine shingle structures and beaches, sand dunes and salt marshes.</p>

Table 4.1: Environmental Sensitivities

Environmental Receptor	Main Features
	<p>Offshore areas of the North Sea contain peak numbers of seabirds following the breeding season and through winter, with birds tending to forage closer to coastal breeding colonies in spring and early summer.</p> <p>The East Inshore and East Offshore Marine Plans (MMO, 2015) indicate a clear seasonality in seabird density within the decommissioning area. Summer and winter density is typically less than 5 seabirds per km² offshore.</p> <p>Across the decommissioning area, the overall seabed vulnerability to surface pollution is classified as moderate. In the waters closest to shore periods of high to very seabird vulnerability to oil pollution occurs during February, April and August to December. For the remainder of the year, seabird vulnerability ranges from moderate to low. In the areas further offshore, periods of high to very high seabird vulnerability to oil pollution generally occurs during February to April and August to December, with moderate to low vulnerability occurring throughout the remainder of the year (ES Section 4.2.3)</p>
Onshore Communities	<p>An onshore decommissioning facility will be used that complies with all relevant permitting and legislative requirements.</p>
Other Users of the Sea	<p>Shipping Shipping density in the area of the infrastructure to be decommissioned ranges from very low to high. The main contributing factor of very high vessel density in the area closer to shore is the number of large international ports within the region including Hull, Immingham, Grimsby and Great Yarmouth (ES Section 5.4).</p> <p>Oil & Gas Industry The infrastructure is located in the SNS gas basin which is densely populated by various installations.</p> <p>See table 1.6 for a list of adjacent facilities.</p> <p>Offshore Renewables Three wind farms are consented in the vicinity of the infrastructure to be decommissioned. The Race Bank wind farm (Blocks 47/24 and 47/25), the Dudgeon wind farm (Block 48/22 and 48/23) and the Triton Knoll wind farm (Blocks 47/14, 47/15, 47/19 and 47/20).</p> <p>Furthermore, the Hornsea Project 1 Transmission Asset (OFTO) Wind Farm export cable, within Blocks 47/17 and 47/18 is currently under construction and is within the vicinity of the infrastructure to be decommissioned (ES Section 5.3).</p>
Atmosphere	<p>Local atmospheric emissions arise from the Victor operations, vessel use and nearby oil and gas facilities (ES Section 8).</p>

4.2 Potential Environmental Impacts and their Management

4.2.1 Environmental Impact Assessment Summary

The potential environmental impacts associated with Victor decommissioning activities have been assessed and it is concluded that the proposed decommissioning can be completed without causing significant adverse impact to the environment. The results of the Environmental Impact Assessment (EIA) will be reported in an Environmental Statement (ES) accompanying the Decommissioning Programmes.

The ES identifies potential environmental impacts by identifying interactions between the proposed decommissioning activities and the associated environmental receptors. The ES also describes the proposed mitigation measures designed to avoid or reduce the identified potential environmental impacts and how these will be managed in accordance with ConocoPhillips's Environmental Management System (EMS) while considering responses from stakeholders.

Table 4.2: Environmental Impact Management

Activity	Main Impacts	Management
Topsides Removal	Energy use and atmospheric emissions (ES Section 8)	All engines, generators and combustion plant on the vessels will be well maintained and correctly operated to ensure that they are working efficiently to minimise energy use and gaseous emissions. Vessel operations will be minimised where practical.
	Underwater noise (ES Section 9)	A noise assessment has been completed to determine the likely impact of noise generated by the proposed operations on marine mammals in the surrounding area. The results of the assessment will be used during the planning of vessel operations.
	Accidental hydrocarbon release (ES Section 13)	Hydrocarbon inventories are to be removed from the topsides prior to commencing removal operations. The SNS Oil Pollution Emergency Plan has been updated in agreement with BEIS to include all planned decommissioning operations.

Table 4.2: Environmental Impact Management

Activity	Main Impacts	Management
Jacket Removal	Energy use and atmospheric emissions (ES Section 8)	<p>All engines, generators and combustion plant on the vessels will be well maintained and correctly operated to ensure that they are working efficiently to minimise energy use and gaseous emissions.</p> <p>Vessel operations will be minimised where practical.</p>
	Underwater noise (ES Section 9)	<p>A noise assessment has been completed to determine the likely impact of noise generated by the proposed operations on marine mammals in the surrounding area. The results of the assessment will be used during the planning of vessel operations.</p> <p>There is no intention to use underwater explosives during these activities.</p>
	Accidental hydrocarbon release (ES Section 13)	<p>The SNS Oil Pollution Emergency Plan has been updated in agreement with BEIS to include all planned decommissioning operations.</p>
	Seabed disturbance and loss of habitat (ES Section 10)	<p>The decommissioning operations will be carefully designed and executed so as to minimise the area of seabed that will be disturbed.</p> <p>Loss of habitat through the introduction of new material to the marine environment is to be avoided or minimised throughout the proposed operations.</p>
Subsea Installation Removal	Energy use and atmospheric emissions (ES Section 8)	<p>All engines, generators and combustion plant on the vessels will be well maintained and correctly operated to ensure that they are working efficiently to minimise energy use and gaseous emissions.</p> <p>Vessel operations will be minimised where practical.</p>

Table 4.2: Environmental Impact Management

Activity	Main Impacts	Management
	Underwater noise (ES Section 9)	<p>A noise assessment has been completed to determine the likely impact of noise generated by the proposed operations on marine mammals in the surrounding area. The results of the assessment will be used during the planning of vessel operations.</p> <p>There is no intention to use underwater explosives during these activities.</p>
	Accidental hydrocarbon release (ES Section 13)	The SNS Oil Pollution Emergency Plan has been updated in agreement with BEIS to include all planned decommissioning operations.
	Seabed disturbance and loss of habitat (ES Section 10)	<p>The decommissioning operations will be carefully designed and executed so as to minimise the area of seabed that will be disturbed.</p> <p>Loss of habitat through the introduction of new material to the marine environment is to be avoided or minimised throughout the proposed operations.</p>
Decommissioning Pipelines	Energy use and atmospheric emissions (ES Section 8)	All engines, generators and combustion plant on the vessels will be well maintained and correctly operated to ensure that they are working efficiently to minimise energy use and gaseous emissions.
	Underwater noise (ES Section 9)	A noise assessment has been completed to determine the likely impact of noise generated by the proposed operations on marine mammals in the surrounding area. The results of the assessment will be used during the planning of vessel operations.

Table 4.2: Environmental Impact Management

Activity	Main Impacts	Management
	Seabed disturbance and loss of habitat (ES Section 10)	<p>The operations to remove the pipeline ends will be carefully designed and executed so as to minimise the area of seabed that will be disturbed.</p> <p>Loss of habitat through the introduction of new material to the marine environment is to be avoided or minimised throughout the proposed operations.</p> <p>The resulting rock berm profile will be overtrawlable.</p>
	Discharges to sea (ES Section 11)	<p>The pipelines will be flushed prior to cutting of the pipeline ends.</p> <p>A chemical risk assessment will be undertaken and operations permitted under the Offshore Chemicals Regulations 2002 (as amended).</p> <p>Hydrocarbon discharges during subsea pipeline disconnect operations will be permitted under the Offshore Petroleum Activities (Oil Pollution Prevention and Control) Regulations 2005 (as amended).</p> <p>Residual hydrocarbons, scale and sediments will be released gradually after through-wall corrosion occurs and the integrity of the pipelines progressively fails. Through-wall degradation is anticipated to begin to occur after many decades (i.e. 60 – 100 years). Pathways from the pipelines to the receptors would be via the interstitial spaces in seabed sediments, overlying rock placement where applicable and the water column. Release would therefore be gradual and prolonged such that the effects on the receiving marine environment are considered to be negligible (ES Section 11.5.2).</p>

Table 4.2: Environmental Impact Management

Activity	Main Impacts	Management
Decommissioning Stabilisation Features	Snagging hazard of stabilisation feature associated with pipeline	<p>Pipelines decommissioned in situ will continue to be shown on Navigational charts.</p> <p>Stabilisation features associated with pipeline remain in situ.</p> <p>Full overtrawlability survey in 500m zone where stabilisation features predominantly exist.</p> <p>Stabilisation features inherently overtrawlable by design.</p>
Decommissioning Drill Cuttings Piles	No drill cuttings piles present	No drill cuttings piles present

Note: The overtrawlability surveys within the Victor JD and JM 500m zones will be conducted at the time of decommissioning. The Victor JM subsea pigging skid is within the Victor JD 500m zone.

5. Interested Party Consultations

Note Section 5 to be populated post consultation.

Table 5.1 Summary of Stakeholder Comments		
Stakeholder	Comment	Response
Statutory Consultees (NFFO, SFF, NIFPO)	NFFO: The Federation has no further comments to add on the documentation received regarding the proposed decommissioning of these assets.	Comments Noted
Statutory Consultees (GMS)	<ul style="list-style-type: none"> - GMG have no objections to the decommissioning methodologies or the proposal to leave the pipelines in situ. - Tampnet owned NSC-1 passes nearby and it is recommended that they are contacted. - Additional cables may be installed, or repairs taking place in the vicinity at the time the decommissioning is undertaken, and I would ask that details and timings of works are published in the Kingfisher fortnightly bulletin to ensure that any cable owner undertaking works nearby can take this into consideration. - There may be other subsea cables in the area –both in service or out of service, and any owners should be identified and contacted if there is likely to be a conflict between them and any decommissioning activities. 	Comments Noted
Other (VisNed)	No comments received.	N/A
Public	Although VisNed are not a statutory consultee their views were obtained during stakeholder engagement in 2017 and no issues were raised.	N/A

6. Programme Management

6.1 Project Management and Verification

ConocoPhillips has established a UK Decommissioning organisation as a department to manage and execute decommissioning projects. ConocoPhillips existing processes for Operations, Planning, Project Management, Procurement, Health Safety and Environment, will be used and tailored to meet the specific requirements of decommissioning projects. ConocoPhillips will manage all permitting, licences, authorisations, notices, consents and consultations.

Any changes to this decommissioning document will be discussed and agreed with BEIS.

6.2 Post-Decommissioning Debris Clearance and Verification

A post decommissioning site survey will be carried out around a 500m radius of installation sites. Oil and Gas seabed debris will be recovered for onshore disposal or recycling in line with existing disposal methods.

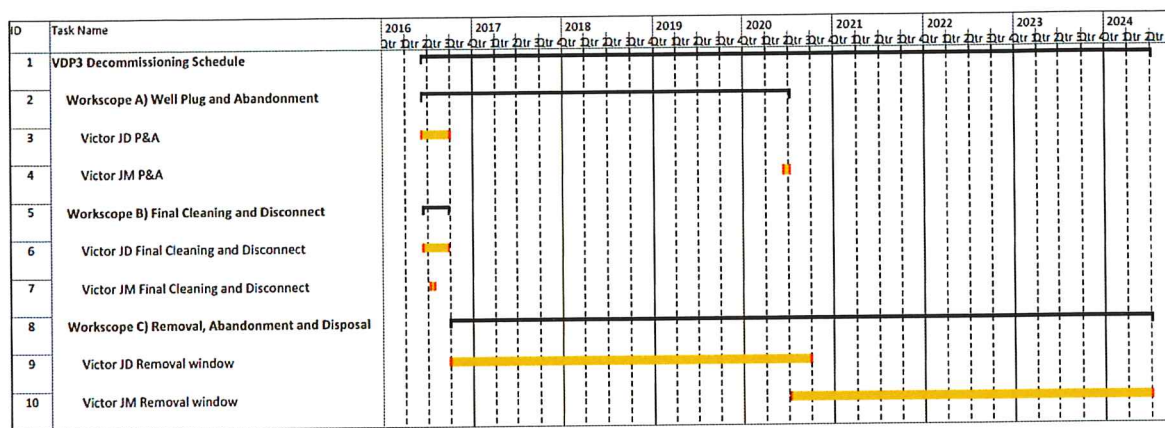
Independent verification of seabed state will be obtained by trawling the platform area of each previously occupied Victor installation and subsea manifold. This will be followed by a statement of clearance to all relevant governmental departments and statutory consultees.

Based on the findings from the Comparative Assessment the Decommission in situ – minimum intervention is the preferred pipeline decommissioning option for VDP3. The evaluation criteria which contributed to the conclusions were safety, environment and cost. The location of the installations and pipelines in the North Norfolk Sandbanks and Saturn Reef Special Area of Conservation (SAC) and Southern North Sea Candidate Special Area of Conservation (cSAC) contributed to the scoring and results

The chosen pipeline decommissioning methodology is to place rock on cut pipeline ends at the platform, the subsea manifold and subsea tee. The pipelines and mattresses are to be left in situ to minimise the disturbance to the established environment and reduce the requirements for the introduction of new material to the North Norfolk Sandbanks and Saturn Reef SAC. Oil and gas debris activity and verification along the remaining pipeline corridor of the infield pipeline sections not subject to actual decommissioning works, will be carried out in accordance with BEIS guidance in operation at the time those activities commence. This activity will reflect the environmental setting of the North Norfolk Sandbanks and Saturn Reef SAC.

The outcomes of the overtrawl in the 500m zones will be reported in the Close Out Report.

6.3 Schedule



Note: This is an indicative schedule and is subject to change based on technical, market, and commercial, factors.

Figure 6.1: Gantt Chart of Project Plan

6.4 Costs

Table 6.1 – Provisional Decommissioning Programme costs*												
Asset Name	TOTAL	Operator Project Management	Facility Running / Owner Costs	Wells Abandonment	Facilities/ Pipeline Making Safe	Topsides Preparation	Topsides Removal	Sub-structure Jacket Removal	Topside and sub-structure Onshore Recycling	Subsea Infrastructure (pipelines, umbilicals, mattresses, SSIV)	Site Remediation	Monitoring
Victor JD												
Victor JM												
VDP3 Total												

*Note: * An estimate of the overall cost has been provided separately to BEIS*

Table 6.1: Decommissioning Costs

6.5 Close Out

In accordance with BEIS guidelines a close out report will be submitted to BEIS within 12 months of completion of the offshore decommissioning scope covered by this decommissioning document. The close out report will contain debris removal and independent verification of seabed clearance, the first post-decommissioning environmental survey and explanation of any variations to the approved Decommissioning Programmes.

6.6 Post Decommissioning Monitoring and Evaluation

A post decommissioning environmental seabed survey will be carried out once the offshore decommissioning work scope covered by this decommissioning document has been completed. The survey will include seabed sampling to monitor levels of hydrocarbons, heavy metals and other contaminants to allow for a comparison with the results of the pre-decommissioning survey.

Results of this survey will be available once the decommissioning document work scope is complete.

PIPELINE RISK BASED MONITORING PROGRAMME

All pipeline systems covered within this Decommissioning Document scope will be subject to survey. The post decommissioning pipeline (and associated stabilisation features) monitoring programme, to

be agreed with BEIS, will:

- Begin with an initial baseline survey covering the full length of each pipeline;
- Be followed by a risk based assessment for each pipeline (and associated stabilisation materials) which will inform the minimum agreed extent and frequency of future surveying. This will take account of pipeline burial, exposure and spanning data derived from the initial baseline survey, all available historical survey information and fisheries impact assessment;
- Provide a report of each required survey (with analysis of the findings, the impact on the risk based assessment and identification of the proposed timing of the next survey in accordance with the agreed RBA approach), for discussion and agreement of BEIS;
- Include provision for remediation in the framework where such a requirement is identified. Appropriate remediation will be discussed and agreed with BEIS;
- Where remediation has been undertaken, a follow up survey of the remediated section(s) will be required;
- In the event of a reported snagging incident on any section of a pipeline, the requirement for any additional survey and/or remediation, will be discussed and agreed with BEIS;
- Will include a further fisheries impact assessment following completion of the agreed survey programme;
- Monitoring will become reactive following completion of the agreed survey programme and BEIS agreement of the analysis of the outcomes;
- Require pipeline information to be recorded on Navigation charts and FishSAFE.

The monitoring programme will also include discussion with BEIS of the long-term pipeline degradation and potential risk to other users of the sea following conclusion of the planned survey programme.

7. Supporting Documents

Table 7.1 : Supporting Documents	
Document Number	Title
BMT-SNS-V-XX-X-HS-02-00003	Environmental Statement For SNS Decommissioning Programmes VDP2 & VDP3
BMT-SNS-V-XX-X-HS-02-00012	Comparative Assessment Report for the Viking VDP2 and VDP3 Pipelines and Associated Mattresses
J/1/20/2342	Fugro EMU Limited, 2013. Decommissioning Environmental Survey Report Viking AR, Viking CD & Viking GD
J/1/20/2342-3	Fugro EMU Limited, 2013. Habitat Assessment Report Viking AR, Viking CD & Viking GD

8. Partner Letters of Support

To:

Department for Business, Energy and Industrial Strategy (BEIS)
Offshore Petroleum Regulator for Environment & Decommissioning
AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

Date: 09-Jan 2019

Dear Sir or Madam,

Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines Decommissioning Programmes

PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 8th January 2019.

We, CalEnergy Gas Limited (company number 04370508) a company incorporated in Scotland having its registered office at Ermy House, Ermy Way, Leatherhead, Surrey, England, KT22 8UX, as a holder of a section 29 notice relative to the Victor field and in accordance with the Guidance Notes¹ confirm that we hereby authorise ConocoPhillips (U.K.) Limited (company number 00524868), a company incorporated in England and Wales having its registered office at 20th Floor 1 Angel Court, London, England EC2R 7HJ, to submit on our behalf abandonment programmes relating to the Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines as directed by the Secretary of State on 8th January 2019.

We confirm that we support the proposals detailed in the Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines Decommissioning Programmes dated 9th January 2019, which is to be submitted by ConocoPhillips (U.K.) Limited in so far as they relate to those facilities and pipelines in respect of which we are required to submit abandonment programmes under section 29 of the Petroleum Act 1998.

Yours faithfully



Simon Smith
UK and Poland Business Unit Manager
For and on behalf of CalEnergy Gas Limited (company number 04370508)

¹ Guidance Notes issued by the Department of Energy and Climate Change on Decommissioning of Offshore Oil and Gas Installations and Pipelines under the Petroleum Act 1998



Dana Petroleum (E&P) Limited
King's Close
62 Huntly Street
Aberdeen
AB10 1RS

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f: +44 1224 616 001
www.dana-petroleum.com

To:

Department for Business, Energy and Industrial Strategy (BEIS)
Offshore Petroleum Regulator for Environment & Decommissioning
AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

Date: 18th January 2019

Dear Sir or Madam,

Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines Decommissioning Programmes

PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 8th January 2019.

We, Dana Petroleum (E&P) Limited (company number 02294746), a company registered in England and Wales and having its registered office at 5th floor, 6 St Andrew Street, London, EC4A 3AE, as a holder of a section 29 notice relative to the Victor field and in accordance with the Guidance Notes¹ confirm that we hereby authorise ConocoPhillips (U.K.) Limited (company number 00524868), a company incorporated in England and Wales having its registered office at 20th Floor 1 Angel Court, London, England EC2R 7HJ, to submit on our behalf abandonment programmes relating to the Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines as directed by the Secretary of State on 8th January 2019.

We confirm that we support the proposals detailed in the Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines Decommissioning Programmes dated 9th January 2019, which is to be submitted by ConocoPhillips (U.K.) Limited in so far as they relate to those facilities and pipelines in respect of which we are required to submit abandonment programmes under section 29 of the Petroleum Act 1998.

Yours faithfully,

A handwritten signature in black ink that reads "M. Almeida".

Mike Almeida
Joint Venture Manager

For and on behalf of Dana Petroleum (E&P) Limited (company number 02294746)

¹ Guidance Notes issued by the Department of Energy and Climate Change on Decommissioning of Offshore Oil and Gas Installations and Pipelines under the Petroleum Act 1998

Esso Exploration and Production UK Limited
Union Plaza
1 Union Wynd
Aberdeen
AB10 1SL
+44 (0)1224 651924

Department for Business, Energy and Industrial Strategy
Offshore Decommissioning Unit
AB1 Building, 3rd Floor
Crimon Place
Aberdeen
AB10 1BJ

23rd January 2019

Dear Sir or Madam,

Section 29 Notice Petroleum Act 1998 – Victor Decommissioning Programme

I acknowledge receipt of your letter dated 8th January 2019 regarding the decommissioning of Victor Field offshore installations and pipelines. This letter confirms that ConocoPhillips (U.K.) Limited as Victor Field Operator is authorised to submit for approval on our behalf a decommissioning programme relating to the Victor JD satellite and JM subsea tie back and associated infield pipelines, as directed by the Secretary of State.

Esso Exploration and Production UK Limited (as a Section 29 Notice Holder) confirms its support for the proposals detailed in the Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines Decommissioning Programmes (dated 9th January 2019) which the Victor Field Operator, ConocoPhillips (U.K.) Limited, will submit for approval in January 2019.

Yours sincerely,



Luke Mathews
Joint Interest Project Advisor

For and on behalf of Esso Exploration and Production UK Limited

Offshore Petroleum Regulator for Environment & Decommissioning
Department for Business, Energy and Industrial Strategy (BEIS)
AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

29 January 2019

Dear Fiona,

Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines Decommissioning Programmes

PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 8th January 2019.

We, INEOS UK SNS Limited (company number 1021338), a company incorporated in England & Wales having its registered office at 15-19 Britten Street, London, SW3 3TY, as a holder of a section 29 notice relative to the Victor field and in accordance with the Guidance Notes¹ confirm that we hereby authorise ConocoPhillips (U.K.) Limited (company number 00524868), a company incorporated in England and Wales having its registered office at 20th Floor 1 Angel Court, London, England EC2R 7HJ, to submit on our behalf abandonment programmes relating to the Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines as directed by the Secretary of State on 8th January 2019.

We confirm that we support the proposals detailed in the Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines Decommissioning Programmes dated 9th January 2019, which is to be submitted by ConocoPhillips (U.K.) Limited in so far as they relate to those facilities and pipelines in respect of which we are required to submit abandonment programmes under section 29 of the Petroleum Act 1998.

Yours sincerely



Noel Hagan
Mature Assets Manager

For and on behalf of INEOS UK SNS Limited (company number 1021338)

¹ Guidance Notes issued by the Department of Energy and Climate Change on Decommissioning of Offshore Oil and Gas Installations and Pipelines under the Petroleum Act 1998

To:

Department for Business, Energy and Industrial Strategy (BEIS)
Offshore Petroleum Regulator for Environment & Decommissioning
AB1 Building
Crimon Place
Aberdeen
AB10 1BJ

Date: 17-01-2019

Dear Sir or Madam,

Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines Decommissioning Programmes

PETROLEUM ACT 1998

We acknowledge receipt of your letter dated 8th January 2019.

We, Spirit Energy Resources Limited (company number 02855151), a company incorporated in England and Wales having its registered office at Millstream, Maidenhead Road, Windsor, Berkshire, United Kingdom, SL4 5GD, as a holder of a section 29 notice relative to the Victor field and in accordance with the Guidance Notes¹ confirm that we hereby authorise ConocoPhillips (U.K.) Limited (company number 00524868), a company incorporated in England and Wales having its registered office at 20th Floor 1 Angel Court, London, England EC2R 7HJ, to submit on our behalf abandonment programmes relating to the Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines as directed by the Secretary of State on 8th January 2019.

We confirm that we support the proposals detailed in the Victor JD Satellite and JM Subsea tie back and Associated Infield Pipelines Decommissioning Programmes dated 9th January 2019, which is to be submitted by ConocoPhillips (U.K.) Limited in so far as they relate to those facilities and pipelines in respect of which we are required to submit abandonment programmes under section 29 of the Petroleum Act 1998.

Yours faithfully,


Gerald Harrison
Company Director

For and on behalf of Spirit Energy Resources Limited (company number 02855151)



Spirit Energy Resources Limited

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iQ Building
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AB11 6EQ

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¹ Guidance Notes issued by the Department of Energy and Climate Change on Decommissioning of Offshore Oil and Gas Installations and Pipelines under the Petroleum Act 1998