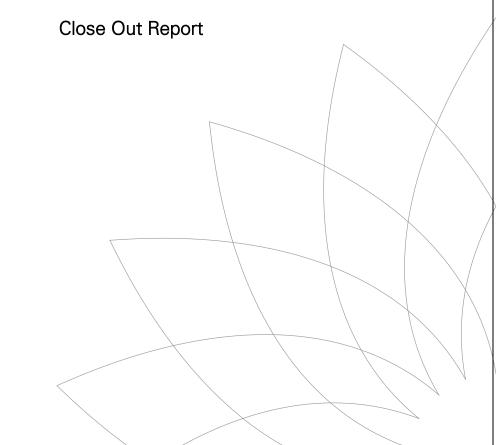
© BP p.l.c.

Security Classification: BP External

Global Projects Organization



Schiehallion and Loyal Phase 1 Decommissioning



B03	Approved for use	C Sloan	04/12/2018	D Orr	04/12/2018	J Blacklaws	04/12/2018
B02	Approved for use	C Sloan	09/08/2018	D Orr	09/08//2018	J Blacklaws	09/08/2018
B01	Approved for use	C Sloan	19/07/2018	D Orr	19/07/2018	J Blacklaws	19/07/2018
A01	Issue for review	C Sloan	0/10/2017	D Orr	0/10/2017	J Blacklaws	0/10/2017
Rev	Reason for Issue	Author	Date	Checker	Date	Approver / Issuing Authority	Date

Refresh Cycle Code (Years):

Unique Identifier:	Not Applicable		Rev			
RD Type:	Not Applicable		B03			
	Lie controlled colors surfaced as at a sellicity.					

Uncontrolled when printed or stored locally

Use and Interpretation of this Document

This document is classified **BP External** Distribution is intended for BP authorized recipients only. The content of this document is proprietary information, protection of which is required by BP's Code of Conduct. Its distribution and use by any person outside BP are subject to the terms and conditions of any applicable agreement or contract, as the case may be, under which it was supplied or received.

The content of this document may differ from or go beyond what is legally required. This document does not affect the obligation to comply with applicable legal and regulatory requirements. BP Requirements, BP Recommendations and BP Permissive Statements apply only if they do not conflict with applicable legal and regulatory requirements. If any apparent conflict with applicable legal and regulatory requirements is identified, a reader should seek advice from BP Legal.

The authoritative set of BP Requirements, BP Recommendations, and BP Permissive Statements is held electronically on http://bprequirements.bpweb.bp.com. Readers are reminded to check that any paper or other version of this document is current.

BP Recommendations are made available to help readers within BP to choose between potential options that may be available to them, for example to convey a desirable (but not mandatory) higher standard going beyond a BP Requirement. An alternative approach may be necessary or appropriate.

This document does not seek to describe or establish an industry standard or practice, and its content may differ from or go beyond what a reader might consider to be good or best practice. The content of this document has been approved for BP's purposes only. No person outside BP is entitled to rely on its content, and BP accepts no liability or responsibility for any such reliance.

The English language version of this document is the original and has primacy over any translation into another language in the event of any conflict or inconsistency.

Copyright © 2013. BP p.l.c. All rights reserved.

Revision History*

Revision Date	Revision Number	Approver	Revision
09/08/2018	B02	J Blacklaws	To address OPRED comments
04/12/2018	B03	J Blacklaws	To address statutory comments

^{*} Only required for B02 revisions and beyond.

Reviewers

Name	Role	Date Reviewed
J. Blacklaws	Project Manager Decommissioning	04/12/2018
D. Orr	Decommissioning Assurance Manager	04/12/2018
A. Innes	Legal Counsel	28/03/2018

Related Documents

Document Number	Document Name
n/a	Schiehallion and Loyal Field Decommissioning Phase 1 Plan

Contents

			Page
1	Back	ground to Schiehallion and Loyal Decommissioning Programme Phase 1	5
2	Over	view of the Schiehallion and Loyal Decommissioning Programme	6
	2.1	Schiehallion FPSO Status	7
	2.2	Schiehallion and Loyal Pipeline Status	7
3	Purpo	ose of Report	8
4	Inforr	mation to third party users of the area	8
5	Deco	mmissioning Cost Overview	10
6	Wast	e Management	10
7	Ident	ified Updates to Schiehallion and Loyal Decommissioning Programme Phase 1	11
	7.1	Status of items to be decommissioned during Phase 1	
	7.	1.1 Field Optimisation	11
	7.2	Schiehallion FPSO	11
	7.3	Well Abandonment Operations	
	7.4	Drill Cuttings	11
	7.5	Flowlines	12
	7.6	Jumpers	12
	7.7	Umbilicals	12
	7.8	FTPs	12
	7.9	Choke Open Close Over-Ride Tool (COCOT) control jumpers	13
	7.10	Mooring lines	13
8	Moni	toring	13
9	Overa	all Summary	14
10	Refer	rences	15
Anne	ex A O	DU Letter Communication	16
Anne	ех В Со	omparative Assessment: Phase 1 Decommissioning Programme Status	18
Fig	ures		
		ocation of Schiehallion and Loyal Fields	
Figu	re 2 –	Third party notifications provided during Quad204 Offshore campaign	9

1 Background to Schiehallion and Loyal Decommissioning Programme Phase 1

The Schiehallion and Loyal Fields are located approximately 130 km west of the Shetland Isles and 35 km east of the UK/Faroes median line, at a water depth circa 350-467 m (See Figure 1). The Fields lie within UKCS Quadrants 204/16a, 204/20a, 204/21b, 204/25a, and 204/25b and are operated by BP Exploration Operating Company Limited (hereafter referred to as BP). They are produced via five drill centres: North, West, Central, North West Area Development (NWAD) and Loyal. First oil from the Fields was produced in July 1998 with production continuing until early 2013 at which time it was suspended to allow for the Field redevelopment. Whilst producing, the Fields were tied back to the Schiehallion Floating, Production, Storage and Offloading vessel (Schiehallion FPSO), from which the produced oil was exported via shuttle tanker to Sullom Voe Terminal whilst gas was exported via the West of Shetland Pipeline System (WOSPS) export line.

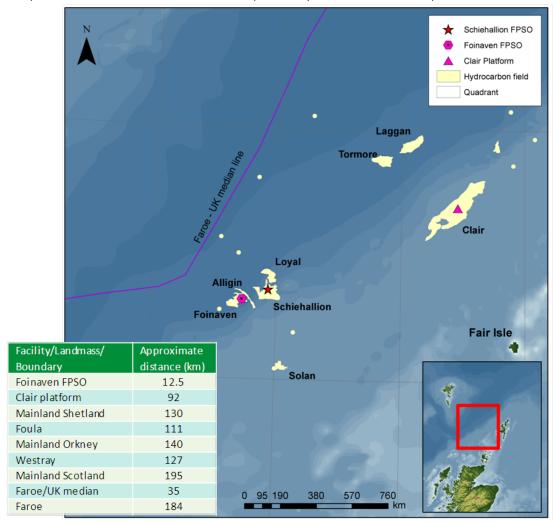


Figure 1 - Location of Schiehallion and Loyal Fields. Table gives the approximate distance from the Schiehallion FPSO to nearby installations and landmasses.

Operating challenges on the Schiehallion FPSO resulted in a deterioration of the production operating efficiency and it was considered unlikely to fulfil the processing requirements of the anticipated economic Field life. Therefore, to allow development of the Schiehallion and Loyal Fields, BP and Partners as licensees of the Fields initiated the Quad204 Project.

The Quad204 Project evaluated a wide range of concept options for further development of the Field. The base case design taken forward from previous design stages was to replace the Schiehallion FPSO with a new-build FPSO, on the same location and where practicable to re-use the existing subsea infrastructure, replacing and extending only as required to support additional wells.

The following section outlines the decommissioning project/plan that was initiated to incorporate the field suspension and decommissioning scope, undertaken as part of the Quad204 Project.

2 Overview of the Schiehallion and Loyal Decommissioning Programme

As documented within the Schiehallion and Loyal Decommissioning Programmes (BP, 2013), the document encompasses three Decommissioning Programmes. This includes one offshore Installation (the Schiehallion FPSO), and 93 pipelines (113 total individual pipelines) associated with the Schiehallion and Loyal fields. Future Phases will include a full field Decommissioning Programme. This document demonstrates the status and close out against the commitments within the Phase 1 of the Schiehallion and Loyal Decommissioning Programmes.

In addition to removal of the Schiehallion FPSO, as part of ongoing modernization of the Field to support future production by the way of a new build FPSO, it was identified that it was not necessary to continue to operate all existing subsea infrastructure up until end of Field life. Therefore, a number of pipelines were identified to be decommissioned as part of the field suspension and removal workscope of the Quad204 Project. BP submitted the Decommissioning Programmes in 2013 (BP, 2013) along with a supporting Environmental and Social Impact Assessment (ESIA) to The Department of Energy and Climate Change (DECC) (now Offshore Petroleum Regulator for Environment and Decommissioning OPRED) detailing those items to be decommissioned and left in situ and items to be decommissioned and recovered. This was referred to as the Schiehallion and Loyal Decommissioning Programmes Phase 1. The intent of this Programme was to outline what infrastructure was part of Phase 1 decommissioning (i.e. as part of the Quad204 Project and Field redevelopment scope) and what infrastructure would then be part of the future, end of field life Decommissioning Programme (Phase 2). Therefore, options reviewed as part of the comparative assessment for decommissioning for Phase 1 were either:

- Leave in-situ in Phase 1;
- Disconnect and Recover in Phase 1, or;
- Partial recovery in Phase 1.

The field suspension and recovery works were undertaken in field between 2013-2017. Following commencement of these works it was determined that some items that had been identified within the Decommissioning Programme (BP, 2013) Phase 1 comparative assessment were either to be recovered as part of Phase 1 or returned to service. This represented a change to original intent.

These changes, which applied to pipelines only, are identified and the applicable consents for where they have been documented is captured within Table 5 in Annex A. Table 2 summarises the status of the Schiehallion and Loyal Pipelines as described within the Phase 1 Programme.

2.1 Schiehallion FPSO Status

Table 1 shows the status of the Schiehallion FPSO as described within the Phase 1 Decommissioning Programme.

	Installation (Schiehallion FPSO) for Decommissioning as per Phase 1 Programme								
Field Name	Schiehallion & Loyal	Quad/Block	204/20a 204/25a 204/25b 205/16a 205/21b	Installations to be fi		field for	Schiehallion FPSO departed field for re-use 2014 (refer to Section 7.2 for further details)		
Distance from nearest UK coastline (km)	130km	Distance to median (km)	35km	Number of Subsea		place at Ph1:	Number included as part of Ph1 Decommissioning:		
				Installations:	7		0		
Water depth	300-550m	Peak Production	200,000 bpd	Number of	In p Ph1	lace at :	P&A as part of Ph1 Decommissioning:		
				wells:	54		0		
Number of	4			Coordinates	W		WGS84		
cuttings piles (left in-situ)				of FPSO:			°21.38'N I°04.07'W		

Table 1 Installation Status after Phase 1 of the Decommissioning Programme.

2.2 Schiehallion and Loyal Pipeline Status

Table 2 shows the status of the Schiehallion and Loyal Pipelines as described in the Phase 1 Decommissioning Programme.

Pipelines for Decommissioning as per Phase 1 Decommissioning Programme						
Schiehallion Pipelines/Umbilical's to be recovered:	74	Comments: PL1378 to be suspended and left in situ. Refer to Table 5 for full				
Total Recovered:	73	details.				
Total Left in Situ	18					
Loyal Pipelines/Umbilical's to be recovered:	14	Comments: PLU3053 and PLU3055 both return to service. Refer to Table 5 for				
Total Recovered:	12	full details				
Total Left in Situ:	3					

Table 2 Schiehallion and Loyal Pipeline Status after Phase 1 Decommissioning Programme completed.

No significant variations to the Decommissioning Programme (BP, 2013) have been identified during Phase 1. Minor variations have been communicated to the Oil and Gas Authority (OGA) and OPRED through ongoing engagement and associated permitting. These have been documented via letter or Pipeline Works Authorisation (PWA) updates, and are shown in Table 5 (Annex A).

3 Purpose of Report

This Report has been prepared to document the status of the Phase 1 of the Schiehallion and Loyal Decommissioning Programme (BP,2013).

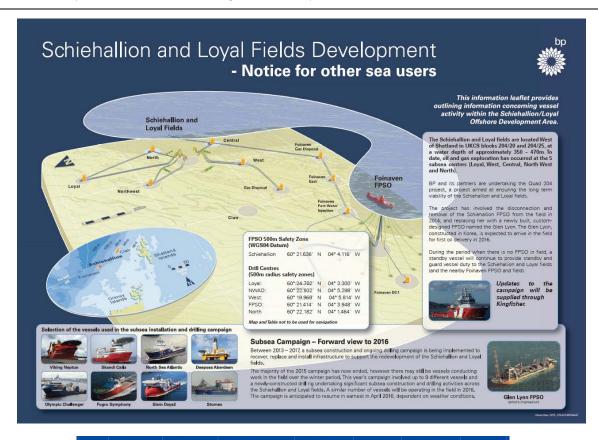
This Report has been compiled with the assistance of Genesis Environmental Consultants to support independent compilation of the status of Schiehallion and Loyal infrastructure, including status of infrastructure contained within Phase 1 of the Schiehallion and Loyal Decommissioning Programmes (BP,2013). Genesis on behalf of BP completed the comparative assessment (DECOM-SCH-HS-CAS-BP-0080-B01) in 2012.

This Report does not include an associated Seabed Clearance Certificate: This activity will not occur until full field clearance survey can be completed as referred to in the Phase 1 Decommissioning Programmes, i.e. at end of field life/ Cessation of Production of both fields.

Both the Schiehallion and Loyal Fields remain operational and therefore the pipeline survey, inspection and maintenance routines are conducted in line with BP North Sea procedures for survey and inspection scopes. Any decommissioned items out with the decommissioning plan have been added to individual Disused Pipeline Notifications (DPNs) and associated Interim Pipeline Regime (IPR) acceptance is documented as part of this process. All work in field completed as part of the Quad204 project was subject to pre and post lay/ removal GVI surveys.

4 Information to third party users of the area

Appropriate information about the status of the Schiehallion and Loyal fields has and will continue to be conveyed in accordance with guidelines of the Glen Lyon Production Consent to Locate (PRA/155 CL/526). During Field Suspension activities, regular updates have been provided to the Kingfisher Bulletin and the FishSAFE database has been updated to reflect these throughout the project, as shown in Figure 2.



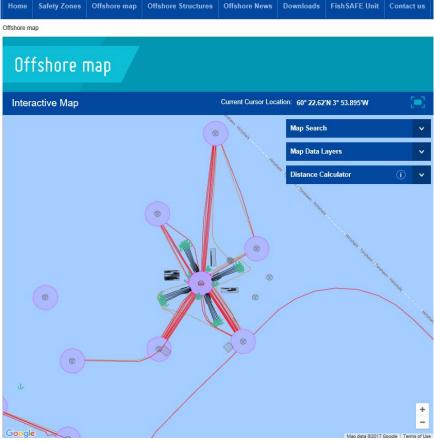


Figure 2 – Third party notifications provided during Quad204 Offshore campaign

5 Decommissioning Cost Overview

Table 3 provides a comparison of the estimated costs within the Phase 1 Decommissioning Programme and a summary of costs incurred in relation to the Schiehallion and Loyal Fields Decommissioning as at 2017.

Scope of Work	Phase 1 Decommissioning Cost Summary (2017) Quad204 Decommissioning Summary (2017)			
Schiehallion FPSO Disconnection and Tow activities	£80m	£217.5m		
Waste treatment and disposal		£37.8m		
Schiehallion and Loyal Field suspension, subsea and pipeline activities	£173m*	£74.1m		
Total	£253m	£329.4m		

^{*}These items were merged within the initial Cost Estimate provided within the Decommissioning Programme Phase 1.

Table 3 - Phase 1 Decommissioning Programme cost estimate relative to costs incurred.

The increase in cost estimate provided in the Phase 1 Decommissioning Programme is primarily due to scope growth, identified after the Programme was originally developed. There were a number of operational issues inherent within the Schiehallion and Loyal Fields including integrity of subsea systems and operational controls. These issues contributed to the decision to conduct the Quad204 project and subsea redevelopment. During infield works, additional remedial works were identified (e.g. during pre-commissioning), which resulted in scope growth in order to support full operational life of the new build FPSO, the "Glen Lyon".

As part of one of the largest subsea field redevelopments, lessons learned for the project have been documented and inputted into the projects and decommissioning organisations within BP.

6 Waste Management

Veolia Waste Management Services were the primary waste contractor used to manage and coordinate waste disposal associated with the Schiehallion and Loyal Field redevelopment, using Lerwick as a primary base for offload, cleaning (if required) and onward transport to final use/disposal.

To date, 97% of the waste from the Schiehallion and Loyal field redevelopment has been recycled or re-used. This excludes the tonnage of the Schiehallion FPSO which was sold to Bumi Armada in 2014. To date, 4482.54Te of material have been recovered from the seabed (excluding moorings). Of this, approximately 526 Te have been reused, 3812Te have been recycled, and 131Te have been sent to landfill.

7 Identified Updates to Schiehallion and Loyal Decommissioning Programme Phase 1

7.1 Status of items to be decommissioned during Phase 1

7.1.1 Field Optimisation

Ongoing optimisation of the infrastructure design during 2013 and 2014 contributed to minor changes in the planned decommissioning scope that was submitted in 2013. These changes are summarized in Table 5 (Annex B). These have been subject to the PWA approval process.

It should be noted that 'decommissioned' within the terms of the Phase 1 Decommissioning Programme means either recovered from the seabed, due to be recovered or long-term suspended with no expectation of re-use. Items that are to be long term suspended will remain in-situ until end of field life and assessed as part of the future field decommissioning project.

It is noted that within the Phase 1 Decommissioning Programme, some PWA pipeline numbers refer to multiple items of equipment. It is recommended that for future, any further items that are to be decommissioned are fully clarified and documented.

It is also noted that some decommissioning operations which were scheduled to occur in 2013/2014 in the Phase 1 Decommissioning Programme were re-scheduled to later years based on vessel availability (conducted between 2014-2017).

Separate to the Quad204 Project there was also an ongoing project taking place named the Subsea Wells Intervention Project (SWIP), which related to the infield development of the Schiehallion and Loyal Fields. As part of SWIP, control lines were identified for recovery. This impacted one control line (PLU1426 U60R-U31) which was scheduled for long-term suspension under the Phase 1 Decommissioning Programme. This was identified for and recovered under SWIP. Any changes resulting from the SWIP were managed via the PWA approval process.

7.2 Schiehallion FPSO

The Schiehallion FPSO departed the field in 2014 and was towed to Rotterdam, Netherlands where completion of sale to Bumi Armada occurred on the basis of refurbishment and redeployment under new operatorship.

7.3 Well Abandonment Operations

No wells were plugged or abandoned as part of the field suspension activities, as documented within the Phase 1 Decommissioning Programme.

7.4 Drill Cuttings

All existing drill cuttings piles have been left undisturbed as documented within the Phase 1 Decommissioning Programme.

Page 11 of 22 Rev: B02 © BP p.l.c. BP Internal

7.5 Flowlines

All 11 flowlines were long term suspended during the Phase 1 Decommissioning Programme. The flowlines are in summarised in Table 4 and detailed in Table 5 (Annex B).

7.6 Jumpers

17 jumpers were due to be decommissioned during Phase 1 of the Decommissioning Programme and all identified jumpers have been recovered.

7.7 Umbilicals

All umbilicals within the Phase 1 Decommissioning Programme were to be long term suspended. The 11 umbilicals comprise 8 static umbilicals, 1 umbilical termination assembly (UTA) and 2 umbilical jumpers. Of the 11 umbilicals 10 have been suspended and 1 umbilical jumper (PLU1426) (U60-U31), was originally to be suspended and left in situ, has been recovered under the SWIP work scope which represents a change to the Decommissioning Programme. All SWIP pipeline scopes were documented under PWA 101/V/14.

The umbilicals are summarised in Table 4 and detailed in Table 5 (Annex B)...

Note, there are some inconsistencies around the description of shorter lengths of umbilical, e.g. PL1426 is referred to as a static umbilical and PLU1889 is referred to as an FTP when they are essentially the same in nature. In any future update to the Phase 1 DP, for the avoidance of doubt it is recommended they are referred to consistently, e.g. umbilical jumpers, with their updated PWA references used.

7.8 FTPs

58 FTPs were detailed within the Phase 1 Decommissioning Programme. Of these, 7 FTPs that were to be long-term suspended or recovered within the Phase 1 Decommissioning Programme have since been identified for a change in service. These are:

- FTP PLU2934 (M41-LP03) was originally to be suspended and left in situ but has now been recovered, PLU2934 is now to be replaced by PLU3703 as per 102/V/14.
- FTP PLU3070 (C1-CW11) was originally to be long term suspended but is now recovered. This was originally included in error in the Phase 1 Decommissioning Programme as this FTP was always planned to be recovered.
- Gas Disposal FTP PLU1435 (U20 AG01) was originally to be long term suspended but has now been recovered.
- FTP PLU2258 (FW11-M121) was originally to be long term suspended but has now been recovered.
- FTP PL1378/1-6 (PL1378; U70-U61 R) was originally to be recovered. This FTP is now suspended and left-in situ.
- FTP PLU2059 (LP07-LW04) was originally to be recovered but is now to be returned to service.

 FTP PLU3055 (LW04-LW06). This FTP was originally to be recovered but is now to be returned to service.

The changes described above have been agreed with the OGA and OPRED.

All FTPs identified for decommissioning either by recovery in Phase 1 or long-term suspension are summarised in Table 4.

7.9 Choke Open Close Over-Ride Tool (COCOT) control jumpers

There are currently two COCOT's which were originally labelled as FTP's in the Decommissioning programme. COCOT PLU2182 has been recovered in Phase 1 whereas COCOT controls jumper PLU2059 was originally to be recovered in 2013 but will be relocated to C34 and re-used as per PWA 19/V/14 and returned to service as described in 6.8.

7.10 Mooring lines

The 14 Schiehallion mooring lines were recovered during 2016.

8 Monitoring

Suspended lines and those left in-situ, as per this Decommissioning Programme, are subject to a pipeline integrity management scheme. The scope and frequency are determined by BP's disused pipeline Inspection Maintenance Regime. Following completion of future decommissioning activities at end of field life, a post decommissioning survey will be conducted within one year of completion to provide baseline survey data. Further surveys will be determined in conjunction with OPRED. Environmental monitoring will be undertaken in accordance with the BP North Sea environmental and survey monitoring programme, with the next environmental survey planned for 2020.

9 Overall Summary

Table 4 Summaries items that formed part of the Phase 1 Comparative Assessment and therefore Decommissioning Programme. The changes in status are documented within Table 5 (Annex B).

Infrastructure	Outcome of Comparative Assessment	Status at end of Phase 1
DUTA	1 for Recovery	1 Recovered
Dynamic Umbilicals	3 for Recovery	3 Recovered
FTPs	53 to be recovered	54 recovered
	5 to be suspended and left in-situ	2 suspended and left in-situ
		2 return to service
Risers (Prod/ WI/ Gas Lift/ Disposal)	15 to be recovered	15 recovered
Production Flowlines	10 for long term suspension and left insitu	10 long term suspended
Production Jumpers	16 to be recovered	16 Recovered
Static Umbilical	8 to be long term suspended and left insitu	8 long term suspended
Umbilical Jumper	1 to be long term suspended	1 recovered
WI Jumper	1 to be recovered	1 recovered
Mooring Lines	14 to be recovered	14 recovered

Table 4 - Summary of Phase 1 Comparative Assessment and Status

10 References

BP (2013) Schiehallion and Loyal Decommissioning Programmes Phase I. Downloaded at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/207203/Schiehallion_Loyal_Fields_Phase_1_Decommissioning.pdf. The supporting Environmental and Socio-Economic Impact Assessment can be downloaded at: http://www.bp.com/content/dam/bp/pdf/Schiehallion_Loyal_Decommissioning_Phase1_ESIA.pdf

BP (2014a). Schiehallion and Loyal Field Suspension. Supporting document to Marine Licence Application. Application for preparatory works. Version B13 submitted to DECC in July 2014.

BP (2014b). Schiehallion and Loyal Field Suspension. Supporting document to Marine Licence Application. Application for decommissioning works. Version B7 submitted to DECC in September 2014.

Annex A ODU Letter Communication



James F Blackings



BP Exploration Operating Company List 1 Well-heads Avenue down AB21 70%

RW BRYONCO/SCH151

25th March 2015

Ms. Julie Benstead Offshore Decommissioning Unit Department for Energy and Climate Change Atholi House **Guild Street** ABERDEEN AB11 6AR

Direct D1224 576352 Main 01224 022000 Modele 07989 662429 Ernall black(/Blok bp. com www.bp.com

Dear Ms. Benstead

Schiehallion Decommissioning Programmes

We write further to the meeting that was held between BP and DECC's Offshore Decommissioning Unit on 29th October 2014 to request clarification as to what DECC requires by way of updates to the Schiehalton Decommissioning Programmes to reflect the revised schedule for mooring chain ramoval (2016) and for the FTPs which have not

The background to the changes to the programmes are that the Qued 204 project has identified that in order to provide the best prospect of achieving first production on the Glan Lyon in 2016, it is necessary to extend Schiehalion moorings recovery to Q3 2016. The reasons for this are:

- The high level of construction activities planned for 2015 with the associated simultaneous operations makes earlier recovery problematical
- None of the planned workscopes in 2015 require anchor handlers. There will be anchor handlers in the field in 2016 for connecting the Glen Lyon modrings and these vessels can be used for the recovery of Schiehallion moorings. Removing the recovery of the Schiehallion moorings from the critical path increases the likelihood of achieving first production in 2016.

The changes to the programme for FTP recovery are:

- One Schiehalton Field FTP that was originally stated as to be recovered is now to be left suspended.
- One Loyal Field FTP will now be recovered at a later date when the well LW15 has been drilled and a tree installed. LW15 is to be drilled in 2015, so the FTP will be recovered either in 2015 or 2016 depending on workscopes. The PWA is approved

ARCO de la Marcha Landry III.

Delanate, USA, No. 1220/2007

Blanck Reg. — Engand No. 5700/701712

Blanck Redemon Chestony Road.

Thumas, Microsok Mrt B. 200

Please could you clarify how the Schiehallion Decommissioning Programmes can be updated to reflect the mooring chain removal and FTPs issues discussed above.

Yours faithfully

James F Blacklaws



Mr. James F Blacklaws BP Exploration Operating Company Ltd 1 Wellheads Avenue Dyce Aberdeen AB21 7PB

Our ref: 12.04.06.08/57C

28th April 2015

Dear Mr Blacklaws

RE: Schiehallion and Loyal Decommissioning Programmes

Further to your letter dated 25th March 2015 regarding the changes to the Schiehallion and Loyal decommissioning programmes. DECC has considered the information provided and concluded the following:

- As the change in the schedule for the Schiehallion moorings recovery is due to synergies and efficiencies with the Glen Lyon development, a formal revision for the Schiehallion programme under Section 34 of the Petroleum Act 1998 ("the Act") will not be required.
- Due to the nature and extent of the activity for the two Fly To Place connectors, this can
 be monitored during the remaining decommissioning phase and a formal revision under
 Section 34 of the Act for either the Schiehallion or Loyal decommissioning programmes
 will not be required.

Therefore, DECC accepts that the changes can be considered as part of the Schiehallion and Loyal decommissioning programmes approved by the Secretary of State on the 4th June 2013.

BP should however, ensure that these changes are detailed in the Close Out Report which will be submitted to DECC in due course (timing to be agreed at next meeting).

Yours sincerely,

Susan Laing Offshore Decommissioning Unit Department of Energy & Climate Change

Atholl House 86-88 Guild Street Aberdeen AB11 6AR T: +44 (0)1224 254076

F: +44 (0)1224 254089

E: susan.laing@decc.gsi.gov.uk

www.decc.gov.uk

Annex B Comparative Assessment: Phase 1 Decommissioning Programme Status

Description	Pipeline No.	Updated PL No (if applicable)	Length (m)	From – To	Outcome of Comparative Assessment (Table 3.6)	Status End of Phase 1	Permitting Reference for Change to Status (if applicable)
Schiehallion Pipelines		арричани,					
Dynamic umbilical	PL1375/1-7	PLU1375	725	FPSO - DUTA D1	To be recovered	Recovered	
FTP	PL1376/1-6	PLU1376	40	FPSO DUTA D1 - UET U11	To be recovered	Recovered	
FTP	PL1377/1-6	PLU1377	170	FPSO DUTA D1-CDA U61R	To be recovered	Recovered	
FTP	PL1378/1-6	PL1378	145	FPSO UTA U70-CDA U61R	To be recovered	Suspended and left in situ	Letter Reference: BP/DECC/SCH151 Acknowledged by DECC 28th April 2015 12.04.06.08/57C Only one FTP was installed under 32/V/03, which was not to be recovered during Phase 1. In 64/V/13 to be suspended.
Static umbilical	PL1379/1-7	PLU1379	250	FPSO UTA U70-UET U71	Suspend and left in-situ	Suspended and left in situ	
Dynamic umbilical	PL1380/1-7	PLU1380	740	FPSO-DUTA D2	To be recovered	Recovered	
FTP	PL1381/1-6	PLU1381	145	FPSO DUTA D2-UET U71	To be recovered	Recovered	
FTP	PL1382/1-5	PLU1382	54	FPSO DUTA D2-UET U51	To be recovered	Recovered	
Static umbilical	PL1383/1-5	PLU1383	2382	FPSO UET U51-UTA U50	Suspend and left in-situ	Suspended and left in situ	
Production Flowline	PL1384		3375	Central M1- FPSO Riser (Hang Off)	Suspend and left in-situ	Suspended and left in situ	
Production Riser	PL1384		3375	FPSO Riser (Hang Off) – FTA 14	To be recovered	Recovered	
Production Jumper	PL1384		82	Central M1- F4	To be recovered	Recovered	
Production riser	PL1385		3305	Central FPSO Riser (Hang Off)- Manifold M1	To be recovered	Recovered	
Production Flowline	PL1385		3305	Central M1- FPSO Riser (Hang Off)	Suspend and left in-situ	Suspended and left in-situ	
Production Jumper	PL1385		75	Central M1- F3	To be recovered	Recovered	
Production riser	PL1386		3372	Central FPSO Riser (Hang Off)- Manifold M1	To be recovered	Recovered	
Production Flowline	PL1386		3372	Central M1- FPSO Riser (Hang Off)	Suspend and left in-situ	Suspended and left in-situ	
Production jumper	PL1386		102	Central M1- F5	To be recovered	Recovered	
Production Flowline	PL1387		3407	Central M1- FPSO Riser (Hang Off)	Suspend and left in-situ	Suspended and left in-situ	
Production riser	PL1387		3407	Central FPSO Riser (Hang Off)- Manifold M1	To be recovered	Recovered	
Production jumper	PL1387		92	Central M1- F2	To be recovered	Recovered	
Production jumper	PL1388/1-3		116	Central Prod Tree CP21-Manifold M1	To be recovered	Recovered	
Production jumper	PL1388JCP01/1-3		35	Prod Tree CP01-CP21	To be recovered	Recovered	
Production jumper	PL1390JCP03/1-3		35	Central Manifold M1D- Tree CP03	To be recovered	Recovered	
Production jumper	PL1390JCP20/1-3		24	Central Manifold M1D-Tree CP20	To be recovered	Recovered	
Gas Lift Riser only	PL1396		749	FPSO Riser (Hang Off)- Central Manifold M1J	To be recovered	Recovered	
WI Riser only	PL1397		697	FPSO Riser (Hang Off)- Central Manifold M2A	To be recovered	Recovered	
Static umbilical	PL1402/1-5	PLU1402	2800	FPSO UET U11-Central UET U10	Suspend and left in-situ	Suspended and left in-situ	
FTP	PL1403/1-5	PLU1403	239	Central UET U12-CDT C1P	To be recovered	Recovered	

Description	Pipeline No.	Updated PL No (if applicable)	Length (m)	From – To	Outcome of Comparative Assessment (Table 3.6)	Status End of Phase 1	Permitting Reference for Change to Status (if applicable)
FTP	PL1404/1-3	PLU1404	90	Central CDT C1P (Via Basket)-Tree CP01	To be recovered	Recovered	
FTP	PL1405/1-3	PLU1405	66	Central CDT C1P-CSA C1A	To be recovered	Recovered	
FTP	PL1406/1-3	PLU1406	66	Central CDT C1P-CSA C1D	To be recovered	Recovered	
FTP	PL1408/1-3	PLU1408	60	Central CDT C1P-Tree CP05	To be recovered	Recovered	
FTP	PL1409/1-3	PLU1409	110	Central CDT C1P-CSA C1B	To be recovered	Recovered	
FTP	PL1410/1-3		82	Central Tree CP08-Tree CP22	To be recovered	Recovered	Wrong PL in decom plan, should be PLU1410JCP08/1-3. Remove PL1410/ Install PLU3650 under SWIP
WI Riser only	PL1412		777	FPSO Riser (Hang Off)- North Manifold M61	To be recovered	Recovered	
Production Flowline	PL1415		3663	West Manifold M21-FPSO Riser (Hang Off)	Suspend and left in-situ	Suspended and left in-situ	
Production Riser	PL1415			FPSO (hang off) - FTA F33	To be recovered	Recovered	
Production Jumper	PL1415		59	West Manifold M21- Well F23	To be recovered	Recovered	
Production Flowline	PL1416		3652	West Manifold M21-FPSO Riser (Hang Off)	Suspend and left in-situ	Suspended and left in-situ	
Production Riser	PL1416			FPSO (hang off) - FTA F34	To be recovered	Recovered	
Production Jumper	PL1416			West Manifold M21 - Well F24	To be recovered	Recovered	
Static umbilical	PL1425/1-7	PLU1425	200	FPSO UET U61-UET U60	Suspend and left in-situ	Suspended and left in-situ	
Umbilical Jumper	PL1426/1-6	PLU1426	190	FPSO UET U60R-UET U31	Suspend and left in-situ	Recovered	Recovered as part of SWIP work scopes. Consented under: (64/V/13) (18/V/14) 101/V/14(SWIP)
Static umbilical	PL1427/1-6	PLU1427	2986	FPSO UET U31-West UTA U30	Suspend and left in-situ	Suspended and left in-situ	
Gas Disposal Riser	PL1431		721	FPSO Riser (Hang Off)- Gas Disposal FTA F21	To be recovered	Recovered	AG01 infrastructure not referenced here, included under PWA 126/V/16
Static umbilical	PL1434/1-2	PLU1434	3679	West UTA U21-Gas Disposal UET U20	Suspend and left in-situ	Suspended and left in-situ	
FTP	PL1435/1-2	PLU1435	82	Gas Disposal UET U20-Well AG01	Suspend and left in-situ	Recovered	Recovered as part of AG01 field suspension works under PWA 126/V/16.
FTP	PL1776/1-3	PLU1776	40	Central CSA C1B-Tree CP06	To be recovered	Recovered	
FTP	PL1777/1-3	PLU1777	42	Central CSA C1B-Tree CP07	To be recovered	Recovered	
FTP	PL1780/1-3	PLU1780	60	Central CSA C1A-Tree CP02	To be recovered	Recovered	
FTP	PL1781/1-3	PLU1781	70	Central CSA C1A-Tree CP14	To be recovered	Recovered	
FTP	PL1850.1-10	PLU1850	98	Central CSA C1A-Manifold M1C	To be recovered	Recovered	
Production Riser	PL1904		728	FPSO RET RT81-Riser (Hang Off)	To be recovered	Recovered	
WI Riser	PL1982		725	FPSO Riser (Hang Off)- West Man M22A	To be recovered	Recovered	
FTP	PL2025JWW11/1- 13		166	West CDA C21-Well WW16	To be recovered	Recovered	
Production Flowline	PL2141		2990	West M24-FPSO Riser RET RT81	Suspend and left in-situ	Suspended and left in-situ	
Production Jumper	PL2141		287	West M24 - F27	To be recovered	Recovered	
Production Jumper	PL2141		194	FPSO West F37 - RT81	To be recovered	Recovered	
Production jumper	PL2173		34	West Prod Tree WP14-Manifold M24	To be recovered	Recovered	
Production Flowline	PL2245		3755	NW M121-FPSO Riser (Hang Off)	Suspend and left in-situ	Suspended and left in-situ	

Description	Pipeline No.	Updated PL No (if applicable)	Length (m)	From – To	Outcome of Comparative Assessment (Table 3.6)	Status End of Phase 1	Permitting Reference for Change to Status (if applicable)
Production Riser	PL2245			NW M121-FPSO Riser (Hang Off)	To be recovered	Recovered	
Production Jumper	PL2245			NW M134 - Well F132	To be recovered	Recovered	
FTP	PLU1406JCP03/1-		61	Central CSA C1D-Tree CP03	To be recovered	Recovered	
FTP	PLU1406JCP20/1-		31	Central CSA C1D-Tree CP20	To be recovered	Recovered	
FTP	PLU1406JCP21/1-		60	Central CSA C1D-Tree CP21	To be recovered	Recovered	
FTP	PLU1889		255	FPSO CDA U61R-CDA U60R	Suspend and left in-situ	Suspended and left in-situ	
FTP	PLU2176		54	West CDA C23-CDA C21	To be recovered	Recovered	
FTP	PLU2182		50	West COCOT CDA C22-WW09 MARS	To be recovered	Recovered	
FTP	PLU2183		78	West CDA C21-COCOT CDA C22	To be recovered	Recovered	
Dynamic umbilical	PLU2241		1924	FPSO-SECU DUTA D3	To be recovered	Recovered	
Static umbilical	PLU2242		4750	SECU DUTA D3-Central UET U12	Suspend and left in-situ	Suspended and left in-situ	
Central UTA U15	PLU2249		NA	Central UTA U15	Suspend and left in-situ	Suspended and left in-situ	
FTP	PLU2254		TBD	NW CDA C123-CDA C122	To be recovered	Recovered	
FTP	PLU2258		152	NW Well FW11-Manifold M121	Suspend and left in-situ	Recovered	Recovered under (64/V/13)18/V/14. Incorrectly stated as to be suspended in decom plan.
FTP	PLU2260		104	Central UET U12-CDT C1P	To be recovered	Recovered	
FTP	PLU2261		30	Central UET U12-CDT C1P	To be recovered	Recovered	
FTP	PLU2270		145	Central CDT C1P-Well CW11	To be recovered	Recovered	
FTP	PLU2278		90	West CDA C23-Well WW06	To be recovered	Recovered	
FTP	PLU2279		147	West CDA C23-Well WW08	To be recovered	Recovered	
FTP	PLU2280		200	Central CDT C1P-Well CW10	To be recovered	Recovered	
FTP	PLU2282		164	Central CDT C1P-Well CW17	To be recovered	Recovered	
FTP	PLU2420		60	Central CSA C1A-Well CP23	To be recovered	Recovered	
FTP	PLU2503		30	West UTA U23-UET U21	To be recovered	Recovered	
FTP	PLU2734		135	Central UET U12-CDT C1P	To be recovered	Recovered	
FTP	PLU2844		146	Central C1D-Manifold M1J	To be recovered	Recovered	
FTP	PLU3059		130	West Tree WW06-Tree WW05	To be recovered	Recovered	
FTP	PLU3061		89	West Tree WW08-Tree WW10	To be recovered	Recovered	
FTP	PLU3062		79	North UTA U50-Tree NW01	To be recovered	Recovered	
FTP	PLU3065		68	Central Tree CW17-Tree CW18	To be recovered	Recovered	
FTP	PLU3068		280	CSA C1A-Tree CW15	To be recovered	Recovered	
FTP	PLU3070		145	Central CDT C1-Tree CW11	Suspend and left in-situ	Recovered	Error in Ph1 Decommissioning Report. This FTP was always planned to be recovered not long term suspended.

Description	Pipeline No.	Updated PL No (if applicable)	Length (m)	From – To	Outcome of Comparative Assessment (Table 3.6)	Status End of Phase 1	Permitting Reference for Change to Status (if applicable)
FTP	PLU3072		170	DUTA D1-DUTA D1	To be recovered	Recovered	
FTP	FEPA Exempt 1		170	D1-U61R	To be recovered	Recovered	
FTP	FEPA Exempt 2		145	C1-Laydown location	To be recovered	Recovered	
Loyal Field Pipelines							
Production flowline	PL1360		6586	Production Manifold M41-FPSO Riser (Hang Off)	Suspend and left in-situ	Suspended and left in-situ	
Production Riser	PL1360			FPSO - FTA52	To be recovered	Recovered	
Production Jumper	PL1360			Loyal M41 - F42	To be recovered	Recovered	
Production flowline	PL1361		6555	Production Manifold M41-FPSO Riser (Hang Off)	Suspend and left in-situ	Suspended and left in-situ	
Production Riser	PL1361			FPSO FTA - F53	To be recovered	Recovered	
Production Jumper	PL1361		54	Production Manifold M41 - Well F42	To be recovered	Recovered	
FTP	PL1370/1-5	PLU1370	89	North UTA U50-UET U41	To be recovered	Recovered	
Static umbilical	PL1371/1-5	PLU1371	4812	North UET U41-Loyal UUTA UNIV	Suspend and left in-situ	Suspended and left in-situ	
FTP	PL1372/1-3	PLU1372	130	UUTA UNIV-Tree LP01	To be recovered	Recovered	
FTP	PL1373/1-3	PLU1373	90	UUTA UNIV-Tree LP02	To be recovered	Recovered	
FTP	PL1374/1-3	PLU1374	88	UUTA UNIV-Tree LP03	To be recovered	Recovered	
FTP	PL2018.1-9 (JLP07)	PLU2018	138	UUTA UNIV-Tree LP07	To be recovered	Recovered	
FTP	PL2019.1-6 (JLW10)	PLU2019	120	UUTA UNIV-Tree LW10	To be recovered	Recovered	
WI jumper	PL2020(JLW10)		82	Loyal manifold M42-Tree LW10	To be recovered	Recovered	
FTP	PLU2059		125	Loyal Tree LP07-Tree LW04	To be recovered	Return to service	To be relocated. Now PLU2059 will be relocated and connected to C34 under PWA 19/V/14 and return to service
FTP	PLU2934		73	Loyal Tree LP03-Manifold M41	Suspend and left in-situ	Recovered	PLU2934 is recovered. PLU2934 is to be replaced by PLU3703 as per 102/V/14.
FTP	PLU3053		94	UUTA UNIV-Tree LW04	To be recovered	Recovered	
FTP	PLU3055		68	Loyal Tree LW04-Tree LW06	To be recovered	Return to service	This jumper is now to be returned to service, for LW04A-LW06. Covered under PA/2211 and PWA/14/17.

Table 5 Field Status for Phase 1 Decommissioning Programme