

Decommissioning Close out Report

HEWETT INSTALLATION 48/29B

VENT STACK REMOVAL AND PREPARATION WORKS

June 2021

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Terms and Abbreviations

Abbreviation	Explanation
ASCO	ASCO Great Yarmouth Licenced Waste Management Contractor
Eni	Eni Hewett Limited. a wholly owned subsidiary of Eni UK Limited
FTP	Field Terminal Platform
IPR	Interim Pipeline regime
Km	Kilometre
m	Metres
N/A	Not Applicable
NORM	Naturally Occurring Radioactive Materials
NRV	Non Return Valve
OGA	Oil and Gas Authority
OPRED	Offshore Petroleum Regulator for Environment & Decommissioning
P&A	Plug and Abandon / Plugging and Abandonment
PSR	Pipeline Safety Regulations
Te	Weight, Metric Tonne
UK	United Kingdom
UKCS	United Kingdom Continental Shelf

1 SUMMARY

1.1 Summary of Approved Decommissioning Programme

Cessation of production for the field was agreed by the OGA in a letter of approval in February 2019.

- Production on 48/29 B formally ceased on 01/03/2019
- The Decommissioning programme for 48/29-B vent stack removal and preparation works was formally approved by OPRED in April 2019.
- The Vent stack was subject to its own DP to allow for rig access for well P&A. The Vent stack would cause an obstruction if not removed.

A summary of the infrastructure decommissioned and the approved decommissioning options is outlined in the tables below. All other infrastructure in the Hewett Field will be covered by a separate decommissioning programme at a later date.

1.2 Associated Decommissioning Approval

Table 1.1: Associated decommissioning Approvals	
Pipeline flushing and change of fluid	PL84 PSR Reg 22(2) Notification: SVC4387440 PL84 PWA Variations: 35/V/19 and 29/V/20

1.3 Overview of Infrastructure Decommissioned

Table 1.2: Overview of Installation(s) Decommissioned		
Surface Installation(s)		
Number	Type	Weight (Te)
1	48/29-B Vent Stack	8.4 Te*

* The original DP had an estimate of removed weight of 8.4 tonnes as the full weight of the vent stacks from the platform weight reports. However the bottom pieces of the vent stacks below the flanges were left in place to avoid the need for cutting and welding around the deck plate. Hence the actual removed weight was 6.7 tonnes.

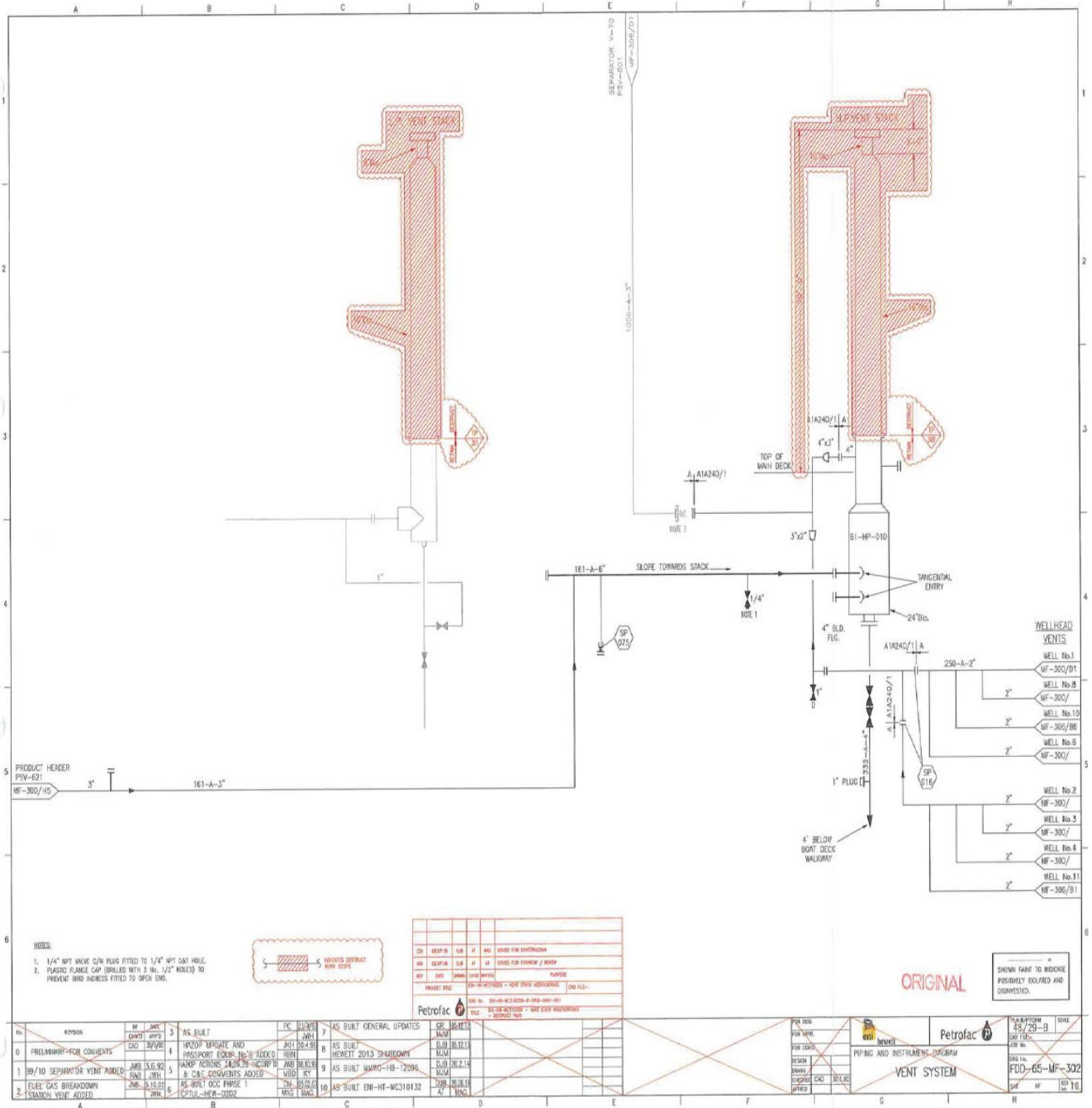
Table 1.3: Completed Decommissioning Activity against proposed decommissioning solution

1. 48/29-B Vent Stack	
Approved Decommissioning Solution	Completed Decommissioning Activity
Required Preparatory Works	<p>Removing hydrocarbons from the 48/29B topsides including the following scopes:</p> <ul style="list-style-type: none"> • Make necessary isolations, venting, purging, check for NORM [01-06 March 2019]. • Break PL84 line at FTP, remove barred Tee and associated pipework to install temporary 24" pig launcher. This is required to isolate PL84 from the process plant on 29A-FTP, to allow the rest of the field to continue production [03-07 March 2019] • Modify pipework at 29B riser (linalog flange, re-align NRVs) to allow flushing fluids to be transferred to disposal wells on 29B and installation of temporary pipework for taking the flushed materials from the pipeline to the 29/B wells for disposal [06-11 March 2019] • Pigging and flushing of PL84 to acceptable cleanliness standard [27-28 April 2019] • Flush and disconnect hydraulics [12-18 September 2019] • Air gap pipeline PL84 on 29A FTP (Removal of pig launcher on FTP) [29-30 April 2019] • Air gap pipeline PL84 on 29B [11-16 March 2020]

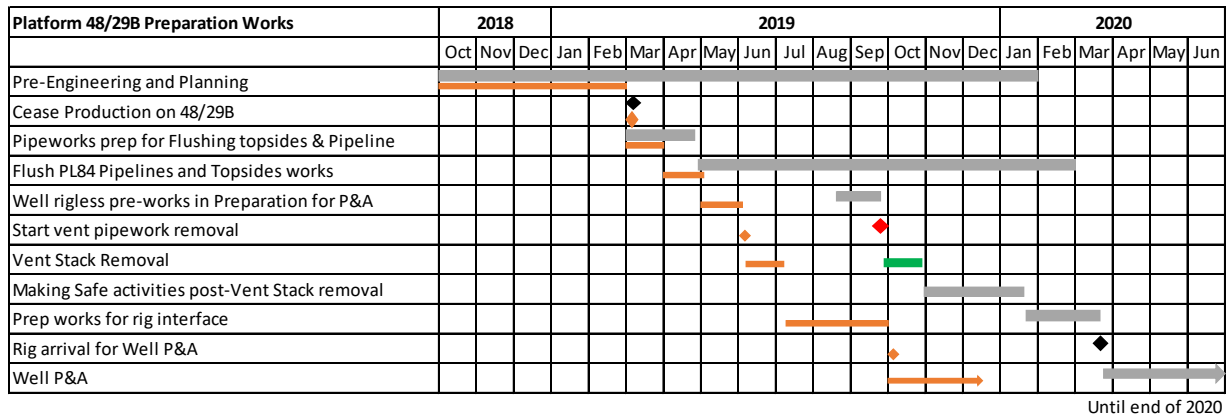
Table 1.3: Completed Decommissioning Activity against proposed decommissioning solution	
Removal for Recycling	<p>Vent Stack Removal Activities:</p> <ul style="list-style-type: none"> • Pre-rigging each vent pipe prior to cutting around 12m from the top of the stack; a single circular cut carried out [18-31 October 2019] • Top section removed by platform crane to lay-down area and cradles. [18-31 October 2019] • Remaining section split at the bottom flange and removed by crane to laydown area. [18-31 October 2019] • The operation was repeated for the remaining stack. [18-31 October 2019] <p>The cut sections back loaded onto a supply vessel for transport to shore and recycling via the normal operations waste management channels through ASCO : CBDU151798 [02 November 2019]</p>

1.4 Schematic of Installation Being Decommissioned

The decommissioned element of the vent stack is shown marked up in Red.



1.5 Gantt chart / Actual completion dates against approved schedule



LEGEND:

- ◆ Planned Milestone
- ◆ Actual Milestone
- ◆ Actual Vent Stack Removal Start
- Planned Activity
- Actual Activity
- Actual Vent Stack Removal Activity

The above schedule shows estimated activity and actual completion dates of work outlined in the approved DP schedule.

COP on 48/29B was achieved on 1st March 2019 after which the preparation works for topsides and pipeline flushing could commence. PL84 was flushed and the topsides were flushed, purged and air-gapped to remove hydrocarbons. Redundant equipment was engineered down and preparation works were carried out on the wells prior to P&A.

There was a minor delay in the removal of the vent stacks against the plan due to lack of readiness (detailed engineering) which led to the postponement of the start of activity to September 2019 to be executed during the annual planned shutdown. However during the shutdown, critical activities (integrity related) took priority and resources were required to address those criticalities deferring this work to October 2019.

Further making safe activities (isolation and removal of hydraulics, pipework drainage and further air-gapping) were conducted between October 2019 and January 2020 before rig interface with the jack-up drilling rig Valaris-72.

An optimisation in the start of the activities had led to postpone the mobilisation to January 2020. Rig was mobilised on the 19th of January 2020 when weather and stability (rock placement required) issues delayed its positioning to March 2020. The Well P&A programme subsequently started on the 9th March 2020.

2 AS-LEFT STATUS

The only infrastructure removed as part of this DP was the 48/29 B vent stack. All other infrastructure remains in place and will be subject to further decommissioning programmes.

Pipeline PL84 was not included in this DP but was taken out of use and will be monitored via the Interim Pipeline Regime (IPR) until final field decommissioning.

3 FUTURE MANAGEMENT AND MONITORING PLAN

All remaining infrastructure will be regularly monitored until final field decommissioning.

4 SEABED CLEARANCE VERIFICATION & ENVIRONMENTAL IMPACTS

The decommissioning activities were specific to the topsides and verification of seabed clearance and post decommissioning environmental assessments are not required.

5 MATERIALS/WASTE

All waste materials were returned to shore on 2nd November 2019, using the vessel Putford Athena, and recycled using appropriately licenced, waste contractors EMR Lenwade appointed under the standard operations waste management contract with ASCO UK Ltd (Registration No. CBDU151798).

The table below summarises the estimated breakdown of materials that was expected to be removed in the Vent Stack scope of work listed in the decommissioning programme.

Table 1.4: Inventory Estimates from Decommissioning Programme		
Material	Weight (Te)	Estimated Volume (m³)
Steel	< 10 Te total (Each pipe weighs 4.2 Te)	20
Concrete	N/A	N/A
Plastic	Minimal	Minimal
Non-Ferrous	N/A	N/A
Hazardous	None Envisaged	None Envisaged
Radioactive Waste (NORM etc.)	None Envisaged	None Envisaged
Other (Waste Fluids)	TBA	TBA

The following amount of waste was actually generated and disposed from the decommissioning of the vent stack.

Table 1.5: Waste generated and disposed of following decommissioning Activity	
Structural material (metals and cables)	6.7

No hazardous or non-hazardous waste was returned to shore or disposed of.

6 LESSONS LEARNED

Liquids Release

During Preparatory works a release to sea of approximately 800 litres of water-condensate mix was reported from the Hewett 48/29B following work undertaken on the vent stack. This was later revised to < 0.1 litre of condensate after an analysis of the liquids. The spill was reported as a PON1 (Ref 8430).

The work involved draining the vent stack knock-out system of residual liquids via a 6mm hole drilled in to the pipework.

Liquids were collected in a bucket, and after a period of time the system was assumed to be adequately drained. The bucket was left unattended under the drain point to collect any residual fluids – however, during this period it overflowed and oily water was released to sea.

Other Lessons Learned

- Ensure that an adequate risk assessment of work to be completed is undertaken, and that it considers all reasonably foreseeable hazards.
- Implement and continue to check the effectiveness of the risk mitigation measures identified in the risk assessment.
- Use the Petrofac Management of Change (MoC) process to request and have authorised any deviation from agreed working methods.
- Use the '20-second scan' method before starting and periodically throughout the work – what could go wrong?

The 20 Second Scan is commonly referred to as a dynamic risk assessment or work site risk assessment, undertaken by the individual worker or team to assess the immediate area and surrounding environment. We do 20 second scans because:

- We want to Prevent incidents
- Make the worksite safe and
- Use it as an opportunity to focus on the task

The 20 Second Scan is undertaken before a task, after work breaks, if anything changes and at the end of the task. We utilise all our senses to scan the areas around us, 360o and at least 20 seconds. The purpose is to identify additional hazards not already considered; any new findings may be minor that could be added to the toolbox talk and discussed with the work party, or could be enough to stop the job and get the permit updated with additional controls. Ultimately it is a double check to ensure that we can proceed safely with the task.

7 COST

Cost data has been provided in confidence to OPRED.

8 PHOTOGRAPHS



Figure 1 - Vent Stack during removal, lifting, laydown and post-removal