Our Ref: 01.01.01.01-5043U UKOP Doc Ref:1194626

Offshore Petroleum Regulator for Environment & Decommissioning

ITHACA ENERGY (UK) LIMITED 13 QUEEN'S ROAD ABERDEEN AB15 4YL

Registered No.: SC272009

Date: 11th March 2022

Department for Business, Energy & Industrial Strategy

AB1 Building Crimon Place Aberdeen AB10 1BJ

Tel Fax

www.gov.uk/beis bst@beis.gov.uk

Dear Sir / Madam

#### THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2020 ABIGAIL, COSLPioneer DRILLING PRODUCER WELL 29/10b-8

A screening direction for the project detailed in your application, reference DR/2235/0 (Version 3), dated 10th March 2022 has been issued under regulation 6 of the above Regulations. The screening direction notice, and any relevant conditions and comments are attached. A copy of this screening direction will be forwarded to the application consultees, the Oil and Gas Authority and published on the gov.uk website.

If you have any queries in relation to this screening direction or the attachments, please do not hesitate to contact **and the state of the state of** 

Yours faithfully

### THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2020

## SCREENING DIRECTION CONFIRMING THAT AN ENVIRONMENTAL IMPACT ASSESSMENT IS NOT REQUIRED

# ABIGAIL, COSLPioneer DRILLING PRODUCER WELL 29/10b-8

## DR/2235/0 (Version 3)

Whereas ITHACA ENERGY (UK) LIMITED has made an application dated 10th March 2022, under The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020, and whereas the Secretary of State has considered the application and is satisfied that the project is not likely to have a significant effect on the environment; in exercise of the powers available under regulation 6, the Secretary of State hereby directs that the application for consent in respect of the project need not be accompanied by an Environmental Impact Assessment, provided that the project is carried out as described in the application for the screening direction and in accordance with the conditions specified in the attached schedule.

In giving a screening direction under regulation 6 of the above Regulations, the Secretary of State accordingly gives his agreement to the Oil and Gas Authority to the grant of consent for the project as detailed in the application WONS/13954/0/GS/1.

Effective Date: 11th March 2022

### THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2020

## SCHEDULE OF SCREENING DIRECTION CONDITIONS

The grant of this screening direction is conditional upon the screening direction holder complying with the following conditions.

### **1** Screening direction validity

The screening direction shall be valid from 11 March 2022 until 1 August 2022.

### 2 Commencement and completion of the project

The holder of the screening direction must notify the Department for Business, Energy & Industrial Strategy (hereinafter called the 'Department') of commencement and completion of the project within two days:

- a) of commencement of the project and
- b) of completion of the project.

Notification should be sent by email to the Environmental Management Team Mailbox: bst@beis.gov.uk

## **3 Prevention of pollution**

The holder of the screening direction must ensure that appropriate measures are taken to minimise discharges, emissions and waste, in particular through the appropriate use of technology; and to ensure that necessary measures are taken to prevent incidents affecting the environment or, where they occur, to limit their consequences in relation to the environment.

#### 4 Inspections

Should the Department consider it necessary or expedient for an inspector appointed by the Secretary of State to investigate whether the conditions of the screening direction are being complied with, the holder of the screening direction shall afford the inspector with such facilities and assistance as the inspector considers necessary to exercise the powers conferred by the regulations. The holder of the screening direction shall additionally ensure that copies (electronic or paper) of the screening direction and any other relevant documents are available for inspection by the inspector at:

- a) the premises of the holder of the screening direction; and
- b) the facilities undertaking the project covered by the screening direction.

#### 5 Check monitoring

Should the Department consider it necessary or expedient to undertake an independent monitoring programme to assess the impact of the project covered by the screening direction, the screening direction holder shall afford the Department with such facilities and assistance as the Department considers necessary to undertake the work.

### 6 Atmospheric emissions returns

Following completion of the project covered by the screening direction, the holder of the screening direction shall report all relevant atmospheric emissions, such as combustion emissions, extended well test emissions or flaring and venting emissions relating to a well test, using the appropriate Environmental Emissions Monitoring System (EEMS) reporting forms. In the case of atmospheric emissions relating to drilling projects undertaken from a fixed installation, they should be included in the annual EEMS reporting forms for the fixed installation.

### 7 Unauthorised deposits

Following completion of the project covered by the screening direction, the holder of the screening direction shall recover any materials accidentally or temporarily deposited on the seabed, such as debris, temporary containers, structures or deposits, or scientific instruments, and shall return the materials to land. If it is not possible to recover any of these deposits, full details of the materials remaining on the seabed must be reported to the Department in accordance with the requirements of Petroleum Operations Notice No.2 (PON2).

#### 8 Screening direction variation

In the event that the holder of the screening direction proposes changes to any of the particulars detailed in the application for a screening direction, the holder must notify the Department immediately and submit an application for a post screening direction amendment. The post screening direction must be in place prior to the amended proposals taking effect.

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# COMMENTS ON THE APPLICATION FOR SCREENING DIRECTION

### Section 1

The attention of screening direction holders is drawn to the following provisions regarding The Offshore Oil and Gas Exploration, Production, Unloading and Storage (Environmental Impact Assessment) Regulations 2020.

1) You are deemed to have satisfied yourself that there are no barriers, legal or otherwise, to the carrying out of the project covered by the screening direction. The issue of a screening direction does not absolve the screening direction holder from obtaining such authorisations, consents etc that may be required under any other legislation.

2) The Department would draw your attention to the following comments:

The Department has no comments.

3) All communications relating to the screening direction should be addressed to:

bst@beis.gov.uk

or

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

Tel Fax

# SCHEDULE OF SCREENING DIRECTION DECISION REASONS

#### 1) Decision reasons

The following provides a summary of the assessments undertaken by OPRED to determine whether an Environmental Impact Assessment is required for this project, summarises the information considered, the potential impacts and sets out the main reasons for the decision made.

In considering whether an Environmental Impact Assessment is required or not, the following have been taken into account:

a) the information provided by the developer;

b) the matters listed in Schedule 5 of The Offshore Oil and Gas Exploration,

Production, Unloading and Storage (Environmental Impact Regulations 2020) (the

Regulations);

c) the results of any preliminary verifications or assessments of the effects on the

environment of the project; and

d) any conditions that the Secretary of State may attach to the agreement to the

grant of consent.

## **Characteristics of the Project**

Having regard, in particular, to the matters identified at paragraphs 1(a) to (g) of Schedule 5 to the Regulations, the characteristics of the project include the following:

Sidetracking of an existing appraisal well (29/10B-8) to a new production well (29/10B - P2W). The well will be drilled from a semi-submersible drilling rig. A 4 point Blow Out Preventor (BOP) tethering system will be used to secure the Blow Out Preventor (BOP)

Cement blocks currently surrounding the wellhead will be moved within the 500m safety zone. A cement patio was formed during top up cement operations on the appraisal well and as a result, the guidebase for the well became cemented in place. In order to free the guidebase, an ROV broke up the cement, with the subsequent cement blocks surrounding the wellhead. The drilling sections for the new side tracked well will be drilled using Low Toxicity Oil Based Mud (LTOBM), which will be shipped to shore for treatment.

## **Description of the Project**

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The Abigail field forms part of the Greater Stella Area, which includes the Stella, Harrier and Vorlich fields. All fields tie back to the Stella FPF-1 which is a floating production platform, where the oil, gas and condensate are treated before being exported via oil and gas export lines. The Abigail well will be tied into a new Abigail manifold before connecting to the existing Stella Main Drill Centre, where hydrocarbons are then treated at the FPF-1. A new 12km pipeline system will be laid connecting the wellhead to the Abigail manifold and to the Stella Main Drill Centre.

The well will be drilled from the COSL Pioneer semi-submersible drilling rig and operations are expected to last 58 days. A cement plug will be set within the existing appraisal well 29/10B-8, with the 9 5/8" casing cut and recovered. Drilling of a 12 1/4" section will be undertaken, followed by an 8 1/2" section, both of which will be drilled with Low Toxicity Oil Based Mud (LTOBM), which will be recovered to the drilling rig. The BOP tethering system will be installed which includes a 4-point tethering system to secure the BOP. The tethering system has been agreed between the operator and the Health & Safety Executive. Contingency sidetracks have been included for both sections, to allow for the worst case drilling scenario to be assessed. The well, which will be drilled within the original appraisal well's 500m safety zone, is within a well-developed area of the Central North Sea and cumulative impacts from drilling discharges, atmospheric release and oil and chemical releases have been assessed.

It has been concluded that there will be no cumulative impacts expected to occur with this project due to the return of the LTOBM back to the drilling rig (no marine discharge), the proposed mitigation and the short duration of the project.

It is not considered to be likely that the project will be affected by natural disasters and the risk of a major accident such as a well blowout has been assessed. The Developer has control measures in place to reduce the risk of a major accident occurring and the probability of such an event occurring is very low.

Other than the matters considered further below, there is not likely to be any significant impact from the project on population and human health.

#### Location of the Project

Having regard in particular to the matters identified at paragraphs 2(a) to (c) of Schedule 5 to the Regulations, the environmental sensitivity of geographical areas likely to be affected by the project has been considered as follows:

The Abigail field is located in the Central North Sea (CNS), approximately 36 km from the UK/Norwegian median line and 233 km from the Scottish mainland. The seabed sediment observed within the area is muddy sand/sandy mud, with the sediment type classed as 'deep circalittoral mud'.

The wave height within the area ranges from 1.5 - 2.8m, and mean water depth is approximately 87.9 m in the south east to 92.2m in the north east of the field. Pockmarks are present in some areas of the field, however none were identified in any of the surveys undertaken in the area, therefore there was no evidence of



leaking gases or submarine structures made by leaking gases.

A number of surveys have been undertaken within the Greater Stella Area. Seabed surveys of the area have shown an abundance of polychaetes, with sparse visible fauna. Observations of hermit crab, seapens, crustacean burrows, vents and worm casts were noted. Occasional large sea anemones and soft corals were also observed. In previous surveys, ocean quahogs were observed at different locations, with the abundance classed as 'occasional' using the SACFOR scale. Samples taken during Abigail pipeline route surveys have also shown the area in terms of visible fauna as sparse, with evidence of bioturbation, crustacean burrows, worm casts and urchin furrows. Seapens were also observed along with stone crab, starfish and juvenile flatfish. A recent survey supported this assessment which found the epibenthic fauna to be sparse, with the dominant fauna including sea pens.

The most recent habitat assessment was undertaken to determine whether 'sea pen and burrowing megafauna communities' habitat was present. Results from the SACFOR assessment concluded that sea pens and burrows were observed in sufficient densities to potentially comprise the OSPAR listed threatened and/or declining species and habitats- 'sea pen and burrowing megafauna communities'. The recent survey report also concluded that Priority Marine Features (PMF) such as burrowed mud and offshore deep muds are likely to be present within the Abigail area.

Minke whale, white-beaked dolphin, Atlantic white-sided dolphin and harbour porpoise have all been recorded in the vicinity of the Abigail area. Densities of the species are categorised as low to moderate, with the exception of the minke whale, white-beaked dolphin and harbour porpoise, with all three of a high density in July, with the harbour porpoise also high in May. Due to the location of the field from shore, grey and harbour seals may be encountered but it is likely that these sightings are in low numbers.

Seabird oil sensitivity in the vicinity of the Abigail field is low to medium throughout the year.

The Abigail field is not situated within any conservation areas, with one of the closest (22km) areas of conservation interest being East of Gannet and Montrose Fields NCMPA. This site is designated for offshore deep sea muds and ocean quahog aggregations. The Fulmar Marine Conservation Zone (MCZ) lies 20km to the south of the project area and this has been designated for the conservation of ocean quahog and its habitats. The Scanner Pockmark SAC is located 100km to the north of the project area and is designated such due to the presence of the Annex I habitat 'submarine structures made by leaking gases'.

The Abigail field lies within fishing designated ICES rectangle 42F1. Fishing vessels are excluded from a number of areas within the Greater Stella Area, due to the number of 500m safety exclusion zones. The proposed operations will coincide with fish spawning and/or nursery activity for a number of species. The proposed project area is primarily used for demersal and shellfish fishing, and the fishing effort in the



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area is rated as low (fishing in the remaining area accounts for 0.2% of both UK landings and value). It is not anticipated that the drilling of well 29/10B-P2W will have a significant impact on the fishing industry in the area.

The closest wreck to the drilling location is 4km (northwest) and there are no wind farms close to the area. Block 29/10 does lie within an area identified by Sectoral Marine Planning for consideration of offshore wind development. The North Sea Link electricity interconnector passes 31km to the north of the site and the closest active cable to the project location is the TAMPNET offshore cable approximately 15km from the Abigail manifold.

It is not anticipated that the proposed project will have a significant impact on either the wrecks or cables.

Given the location of the project, it is not likely that the areas identified at paragraphs 2(c)(i), (iii), (iv), (vi), (vii) of Schedule 5 to the Regulations will be affected by the change to the project.

# Type and characteristics of the potential impact

In accordance with paragraph 3 of Schedule 5 to the Regulations, the likely significant effects of the change to the project on the environment have been considered. Potential effects on the environment from the activities associated with the project were assessed, including impacts arising from atmospheric emissions, seabed disturbance, physical presence, planned discharges and accidental spills. Other than the matters considered further below, there is not likely to be any significant impact from the change to the project on population and human health.

There will be a 500 m radius safety zone around the new Abigail well, which will exclude unauthorised access of vessels and prohibits access to fishing vessels. No additional impacts to other marine users are identified as part of the drilling of well 29/10B-P2W. The well is being drilled from a semi-submersible drilling rig, however the short duration of the drilling programme (52 days) means that there should be no likely significant effects in terms of physical presence from the project.

Cuttings from the LTOBM sections will be pumped back to the drilling rig for storage and onshore treatment and there will be no discharge to the marine environment.

Seabed disturbance will occur from the anchor chains for the semi-submersible drilling rig, albeit these will be temporary, but there will be permanent seabed disturbance from the movement of the cement blocks, and the BOP tethers (which will remain in place for the lifetime of the well). The cement blocks were formed during the conductor cementing operations for the appraisal well. The cement had stuck to the guidebase, and the cement had to be broken up to free it. As a result, the cement blocks surround the wellhead. These cement blocks will have to be moved (within the 500m zone) in order to make way for the drilling of the new well. The operator has committed to removing these blocks from the seabed during decommissioning.



The disturbance of the seabed could result in the smothering and mortality of benthic fauna (particularly sea pens and burrowing megafauna and ocean quahog) which will result in some short-term temporary impacts. Burrowed mud habitats show a medium sensitivity to abrasion/penetration which may be caused by the project activities. Sea pen have been shown to re-anchor themselves after disturbance and can be resilient. Ocean Quahog are sensitive to increased siltation and can bury into the sediment when disturbed as long as their inhalant siphon is not damaged. Ocean quahog have a short life span and a high reproduction rate, and given the small area of seabed affected, it is not thought that the project activities will impact on the population of the species. It is expected that the benthic communities will regenerate in the area over time.

Any noise will not be significant, and it is concluded that activity is not expected to have a likely significant effect on the site in relation to harbour porpoise and the supporting habitats and prey.

There are no expected transboundary effects from the proposal to drill 29/10B-P2W well. The nearest boundary (UK/Norwegian median) is located approximately 36 km from the proposed well location. It is not considered likely that any planned operational discharge (aborted cement job and chemicals) will be detectable.

A worst-case major accident scenario resulting from a potential well blow-out has been modelled for the Abigail field and assessed. The results show that the probability of a large oil spill from the proposed drilling is capable of causing a major environmental incident (MEI), however the probability with suitable mitigation is low. Therefore, the risk of an oil spill event that could have a significant impact on the environment is minimised.

The proposed drilling operation will utilise the power generation equipment on the COSL Pioneer. Atmospheric emissions have been assessed from the power generation on the drilling rig, and the support vessels, guard vessel, anchor handling vessels and helicopter trips. The drilling company that own the COSL Pioneer have a 2025 ambition to provide climate neutral services by complying with a number of ISO management systems and standards, and using energy control systems that monitor energy consumption to reduce CO2 and NOx by optimising their operation.

A short well test will be undertaken to assess the reservoir properties and clean the well. The oil, gas and condensate produced from the well will be flared by the COSL Pioneer and the emissions have been assessed. The short duration of the test contributes < 0.15% of the total UKCS CO2e emissions from flaring (using 2018 as a baseline), and is not expected to have a likely significant effect on the environment.

## 2) Decision

Taking the above considerations into account, the Secretary of State has concluded that the project is not likely to have a significant impact on the environment and that an environmental impact assessment is not required.

# 3) Mitigation of significant effects

The following are features of the project or measures envisaged that the developer has proposed to avoid or prevent what might otherwise have been significant adverse effects on the environment:

n/a