

Our Ref: 01.01.01.01-5241U
UKOP Doc Ref:1230582



Offshore Petroleum Regulator
for Environment & Decommissioning

PETROFAC FACILITIES MANAGEMENT LIMITED
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Registered No.: SC075047

Date: 12th October 2022

Department for Business, Energy
& Industrial Strategy

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Dear Sir / Madam

**THE OFFSHORE OIL AND GAS EXPLORATION, PRODUCTION, UNLOADING
AND STORAGE (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS
2020
GANNET E FIELD, DEVELOPMENT WELL 21/30c- GE04**

A screening direction for the project detailed in your application, reference DR/2282/0 (Version 2), dated 11th October 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 [REDACTED] on [REDACTED] or email the Environmental Management Team at bst@beis.gov.uk.

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**

GANNET E FIELD, DEVELOPMENT WELL 21/30c- GE04

DR/2282/0 (Version 2)

Whereas PETROFAC FACILITIES MANAGEMENT LIMITED has made an application dated 11th October 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 agreement to the Oil and Gas Authority to the grant of consent for the project as detailed in the application, WONS/14628 (Drilling) & WONS/14651 (Completion).

Effective Date: 12th October 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 15 October 2022 until 28 February 2023.

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 [REDACTED]

Fax [REDACTED]



SCHEDULE OF SCREENING DIRECTION DECISION REASONS

The Secretary of State has decided that, based on the information provided, the project is not likely to have a significant effect on the environment. The main reasons for this decision are:

1) Decision reasons

The following provides a summary of the assessment 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 has 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 the 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:

Summary of the Project

Drilling of the Gannet E field development well: 21/30c GE04
Top two sections: 42"x36"x30" and 26" drilled with water-based mud (WBM)
Lower three sections: 16", 12 " and 8 " drilled with low toxicity oil-based mud (LTOBM).
Run and cement 36x30" conductor, 20" surface and 13-3/8" and 10- "x9-5/8" casings.
Run completions.
Install vertical xmas tree
Suspend well for later tie in to production
OGA (NSTA) consent application ref: WONS/14628 (Drilling) & WONS/14651 (Completion)

Description of the Project

This project is the drilling of subsea development well 21/30c GE04 in the Gannet E



field using the Stena Don semi-submersible rig which will be positioned using eight anchors and chains with a temporary 500m exclusion zone, mostly overlapping an existing permanent southern drill centre 500m safety exclusion zone.

GE04 is a single well targeting oil and gas in the southern part of the reservoir, the fourth well in the field proposed for production at Triton Floating Production, Storage and Offloading (FPSO) facility. It is estimated that drilling will take 84 days (with an additional 28 days contingency) between 15th October 2022 and 28th February 2023.

It will be drilled in five sections to near horizontal. Two tophole sections 42 x 36 x 30 and 26" to be drilled with WBM with cuttings discharged direct at the seabed followed by cleaning with viscous sweeps, displaced to WBM to run and cement the conductor (tophole) and 20" surface casing (26" section). The blow out preventor (BO) and drill rig riser then attached.

The three lower-hole 16, 12.25 and 8.5" sections to be drilled with LTOBM, returned to rig, separated, recovered for re-use and cuttings contaminated with LTOBM skipped and shipped onshore for disposal. The lower two 13-3.8" and 9-5/8" casings run and cemented prior to drilling the 8.5" section, not cased. The well will be cleaned, OBM returned to the rig for re-use or onshore disposal. The well will be circulated to treated brine.

The 8.5" section will be lined with gravel pack sand screens and production packer set followed by cleaning with inhibited seawater and chemicals to remove OBM/debris, progressively circulating to inhibited seawater only. Rig fluid returns with residual LTOBM will be skipped and shipped or discharged when analysed concentration is less than or equal to 30 mg/l.

Seawater in the well will be treated to prevent degradation of assets and the upper completion run. The BOP will be recovered, xmas tree installed and tested and valves closed and well suspended for later tie in to production.

There is not likely to be any significant impact from the project on population or human health. It is not considered to be likely that the project will be affected by natural disasters. No pollution or nuisances are foreseen from the project.

No cumulative impacts are expected to occur with any other existing or approved projects.

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.

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: -

Well 21/30c-GE04 is located approximately 163 km from the Scottish coastline and 88.5km west of the UK/ Norwegian median line. Water depth at the drilling location is 96 metres.

Winds predominate from a south west and north-north-east direction averaging 11m/s with gales greater than 17.5 m/s between November and March. The mean spring tidal range is between 1.1 and 2m and mean significant wave height 2.1 to 2.4m. The central North Sea (CNS) has weak semi-diurnal tidal current of 0.4m/s with local current of 0.18 m/s with a north north-easterly movement.

Predictive seabed mapping indicates low energy deep circalittoral sand to be present. Survey results confirm homogenous sandy mud or muddy sand with varying shell content, classed as 'deep circalittoral sand'. Results confirm fine to very fine sand with shallow seabed depressions where shell material was found and seabed scars.

There is no evidence of any Annex I habitats as shallow depressions showed no evidence of methane derived authigenic carbonate. The nearest Special Area of Conservation (SAC) designated for pockmarks is the Scanner Pockmark 130km north. The nearest Nature Conservation Marine Protected Area (NC MPA), East of Gannet and Montrose Fields NC MPA is designated for 'offshore deep-sea mud' habitat and 'ocean quahog' aggregations and their supporting sands and gravels habitat 7km away. One adult Ocean quahog, OSPAR listed as threatened or declining and a Priority Marine Feature (PMF) was found following a nearby survey and could be present. Seapen and faunal burrows were observed. Further assessment and comparison with previous surveys concluded the potential for the OSPAR listed 'seapen and burrowing megafauna communities' habitat to be present as well as the broad scale PMF habitat 'offshore deep-sea muds' and 'offshore subtidal sands and gravels.

The benthic community associated with these sediments are dominated by polychaete worms and bivalve molluscs, confirmed by survey along with burrowing sea urchins and brittle stars in the wider area. Epifauna include sea pen, anemones, hermit crab and starfish with tracks and burrows indicating potential Norway lobster. Sponges and faunal turfs with faunal tracks were observed in shelly courser sediment areas.

The proposed operations are unlikely to coincide with spawning periods for lemon sole but will coincide with sandeel and cod spawning, however sandeel are unlikely at GE04 due to the silt/ clay content of sediment and cod (which consistently returns to selected spawning areas) prefers courser sand. Peak spawning of nephrops is outwith the drilling period. Several nursery species are present with juvenile haddock, whiting Norway pout, hake and monkfish present but no high intensity nursery grounds. PMF species spawning/ nursery include whiting, blue whiting, cod, Norway pout, blue whiting, saithe, ling, monkfish, sandeels, herring, mackerel and spurdog (spiny dogfish).



Seabirds observed at the well location during the proposed drill period include Northern fulmar and kittiwake (declines in population recent years), gannet, guillemot and razorbill (increased population in recent years), storm petrel, puffin and great skua. Seabird sensitivity to accidental spill is low for the proposed drilling period in this location with no data for November.

The most observed cetacean species is harbour porpoise, white beaked dolphin, white sided dolphin and minke whale. All cetaceans are 'species of national importance' (European protected species - Annex IV of the habitats directive and PMF). Harbour porpoise Annex II listed. Sightings are low or no data for the proposed project period. Grey and harbour seals (Annex II listed and PMF) are unlikely in significant numbers 163 km from shore. Grey seal density offshore is low October to November due to pupping and moulting in February.

The project is in the National Marine Plan Area for Scotland. GE04 well is in International Council for the Exploration of the Seas (ICES) rectangle 45F0, an area targeting demersal species. Haddock, cod, saith and hake are relatively abundant (quantity and value) and small quantities of Nephrops are landed. Effort declined from 2016, increased recently but is low in a UK context. Pelagic and shell fish are less abundant and low in a UK context.

A vessel traffic survey was undertaken indicating 24 shipping routes and approximately 125 vessels are likely to pass within ten nautical miles of the well or 3 vessels per day mostly supply vessels with the closest within 0.55km of the well. A moderate to **low** collision frequency is calculated. The GE-04 rig location is predominantly within the existing 500m safety zone of the Gannet E development, 2.6km from field production at Triton Floating Production Storage and Offloading (FPSO) installation. Anchors extend slightly beyond this zone and further risk management measures will be put in place.

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 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 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.

The discharge of chemicals used to drill the well, including drill fluids, cementing, completion and well clean-up operations have been assessed and are not considered to have a likely significant environmental impact. Water based/ cuttings from the tophole sections will be discharged at the seabed. WBM has similar composition to natural sediments. A localised pile of 2m is predicted at the wellbore decreasing up to 100m with no evidence at 200m which may result in localised loss



of benthic species including individual nephrops, with no likely significant effect. Cuttings containing LTOBM (chemical oil) will be skipped and shipped. Cement contaminated with LTOBM will be set and subsequently milled out to drill the next lower section with a 16" rather than 17.5" section selected to minimise overall cuttings/ LTOBM volume.

During normal cementing operations any discharges of cement mixture are limited to minor cement discharge at the seabed in securing the tophole section and residual volume from cleaning out mixing units after use with chemicals, risk assessed, with no likely significant environmental impact.

Fluids from cleaning the well and running the completions consist of inhibited seawater containing residual base oil (LTOBM) to be contained, separated, analysed and where a concentration of 30 mg/l or less of LTOBM is achieved, discharged or if greater skipped and shipped to shore for processing. Discharges have been assessed and are not considered to have a likely significant effect on the environment.

The closest marine protected area is 7km from the project. Impact from discharges on the potential for PMF and OSPAR listed habitat/ species will be localised. Recovery over a short period of time is expected due to dispersion, dilution, photo and biodegradation and oxidation. If ocean quahog is present, it can tolerate some disturbance. Although the proposed project coincides with fish spawning and nursery species it is less likely that benthic spawners will be present. It can be concluded that the project will not have a significant effect on seabed habitat, benthic/ fish species.

Operations covered by this permit will coincide with low seabird sensitivity for Block 21/30c. Mitigation is in place to ensure the risk of any release or discharge that could be harmful to seabirds is minimised. The project is not considered to have a significant impact on seabirds.

Minke whale and white-sided dolphin have been sighted with low density during the proposed drilling period. Other species may be present but not observed. All cetaceans are species of national importance, Annex IV European protected species and harbour porpoise Annex II listed under the Habitats Directive. Given the natural avoidance behaviour of cetaceans, it is not expected that these species would be significantly impacted by the project.

There will be eight anchors and chains, pre-laid extending 1,600m at furthest from the rig. Anchors plus dragging could impact 2840m² of seabed. Chain interaction with the seabed including lateral movement and tensioning on rig hook up could impact 46,875m². Dynamic positioning (DP) for rig hook up using thrusters requires four transponders attached to clump weights, a total seabed footprint of 2m². A total of 0.05km² of seabed could be directly impacted by the drill rig/ mooring and the same area again with sediment resuspension. Anchors will remain submerged in the sediment during operations with short term loss and disturbance greatest during their laying and retrieval. Mooring the drill rig could result in direct loss and disturbance to PMF, OSPAR listed and sessile organisms but limited to individuals with potential for



short term biological recovery. Seabed impacts are therefore not considered to be significant.

The anchors and chains extend beyond the 500 m safety zone which excludes unauthorised access by vessels. The nearest vessel passes 0.55km from the project with most risk arising from offshore supply and transiting fishing vessels within 10 nautical miles of the well. Appropriate measures including communications, surveillance monitoring and navigational markings will be in place to minimise risk to other sea users. The probability of collision is low and managed by vessels increasing passing distances. The effects on shipping navigation are considered not to be significant. A well tree protection structure will be laid for the life of field to mitigate snag hazard. It is concluded there will be no likely significant effect on other users of the sea.

There are no expected transboundary effects from the drilling operations from the project location. The nearest boundary (UK/Norway Median Line) is located approximately 89 km away. It is not considered likely that any planned operational discharge will be detectable at this distance from the drilling site.

Although not a planned activity, a worst-case major accident scenario resulting from a potential well blow-out was modelled and assessed. The probability of a large oil spill from the proposed operations is low. Therefore, it is considered that the control measures in place to prevent loss of well control, minimise the risk of an oil spill which could have a significant impact and the proposed operations carried out as planned are not likely to have a significant effect on the environment.

The largest component related to emissions is expected to be from the drilling rig and its support vessels. Assessment indicates that the project will generate a relatively small proportion of emissions arising from UKCS oil and gas production. Mitigation measures are in place to minimise impacts. Emissions arising from the project will not have a significant impact on air quality.

The drilling operations do not contradict any of the Scottish Marine Plan objectives and policies. It is considered that the drilling of the well is not likely to have a significant impact with other offshore activities or other users of the sea and no cumulative impacts are expected to occur.

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.

2) 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:

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There are no significant adverse effects on the environment.