

Environmental Statement (ES) Summary and Sign-Off

Title:	Lagavulin Exploration Well Environmental Statement
Operator:	Chevron North Sea Limited
Report No:	W/4062/2009
Submission Date:	March 2010
Block No:	217/15 & 217/10
Development Type:	Exploration well
Reviewer:	Saravanan Marappan
Date:	August 2010

A) Project Description:

Chevron is planning to drill an exploration well in Quadrant 217 West of Shetland, to target the Lagavulin prospect. The primary well location lies in Block 217/15 and Chevron have identified a contingency well location in Block 217/10 should it be required to relocate. The proposed exploration well is located approximately 260 km North of the Shetland Isles and approximately 47 km from the median line between UK and the Faroe Islands.

The main purpose of the proposed drilling programme is to identify whether hydrocarbons are present. The proposed well will be suspended if it is successful, for future re-entry. If unsuccessful the proposed well will be plugged and abandoned.

The well will be drilled in a water depth of approximately 1,569 m using the drill ship *Stenna Carron*, and the drilling is expected to last for 109 days, commencing 7 September 2010. It is planned to drill the well using water based mud (WBM), with a contingency to use low toxicity oil based mud (OBM) in the lower sections of the well (16", 12¼" and 8½" sections). Any spent OBM and cuttings generated during the drilling of the lower sections will be skipped and shipped to shore for treatment and disposal, or processed on board the vessel using the hammermill prior to disposal overboard.

B) Key Environmental Impacts:

The EIA identified and discussed the following key activities as having the potential to cause an environmental impact:

- Presence of drill ship and wellhead
- Discharge of water-based mud and cuttings
- Noise
- Atmospheric emissions

- Wider concerns – accidental events, transboundary issues, cumulative effects

C) Key Environmental Sensitivities:

The EIA identified the following environmental sensitivities:

- **Fish:** There are no identified spawning or nursery areas within Quadrant 217. Haddock and Saithe have spawning areas in adjacent Quadrant 208 and 209 and there is a nursery area for Blue Whiting. The spawning and nursery areas are extensive and it is unlikely the drilling of the Lagavulin exploration will impact these species.
- **Seabirds:** Seabird data for Block 217/15 is incomplete, but indicates that vulnerability is highest in August and moderate to low during October and January. Data for adjacent blocks suggests moderate to low vulnerability during the proposed drilling operation. It has been assessed that there are sufficient mitigation measures in place to prevent a significant impact.
- **Protected habitats:** Site survey did not identify any potential Annex 1 habitats within the vicinity of the proposed project. The proposed well location is in an area where there are aggregations of seafloor mounds, or mud diapirs (the Pilot Whale Diapirs). Two mud diapirs have been identified near the proposed well location, one 600 m to the north and the other 1,250 m to the south of the primary well location. Site survey has shown no rare or unusual benthic species, or an abundance of species, associated with these mud diapirs. The potential impact of the drilling discharges is therefore not expected to be significant.
- **Protected species:** Minke whale, pilot whale, white-beaked dolphin, white-sided dolphin and harbour porpoise have been recorded in this general area, with highest concentrations recorded from May to December. Killer whales have also been recorded in very high numbers in June, and in moderate numbers in July, but the number of sightings is low in November. Bottlenose dolphins have not been recorded in this general area. Grey and Common Seals inhabit the coastal waters of Shetland and Orkney Islands and, although common seals have occasionally been observed to travel long distances when foraging, both species are unlikely to be present in the area. Any disturbance of marine mammals is expected to be limited to the drilling period, and the short duration and localised disturbance is considered unlikely to have any significant impact.
- **Other users of the sea:** The proposed exploration well is situated within ICES rectangle 54E8. During 2008, no landings were recorded from this area, and a total of only 1.2 days fishing effort was recorded in 2006. Shipping density in the vicinity of the proposed exploration well is also relatively low.

D) Consultees:

The Joint Nature Conservation Committee (JNCC) and Marine Scotland made the following comments:

JNCC: JNCC confirmed that the exploration well is unlikely to have a significant environmental impact on the nature conservation value of the marine environment.

Marine Scotland: Marine Scotland confirmed that they were content for the Lagavulin ES to be accepted.

E) Public Consultation: No comments were received following the public notice.

F) Further Information: Further information was requested from Chevron following the DECC review, which included clarification of drilling discharges and proposed mitigation measures. Additional information was provided by Chevron on 7 June 2010 and 22 June 2010, which adequately addressed the issues raised.

G) Conclusion:

Following consultation and the provision of further information, DECC OED is satisfied that this project is unlikely to have a significant environmental impact, and content that it will not have a significant adverse effect on the marine environment in general or on any protected sites or species.

H) Recommendation:

DECC OED recommends that the Lagavulin Exploration Well is given consent to proceed.

Approved : Sarah Pritchard - Head of Environmental Operations Unit

Name: *Sarah Pritchard*

Date: *03/09/2010*