



# 2023 CEAA Conditions Closure Report Executive Summary

## Newfoundland & Labrador Orphan Basin Exploration Drilling Program

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30/Oct/2023	B02	Allen Sherritt	Changed title from 2018 to 2023
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**Operating Management System (OMS) – Sub Elements and Group Essentials**

Sub Element	Sub Element Title	Group Essentials
3.6	Environment	3.6.1, 3.6.2
7.1	Regulatory	7.1.3, 7.1.4, 7.1.5

**Reviewers**

Name	Role	Type of Review	Date Reviewed
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# 1. INTRODUCTION

bp Canada Energy Group ULC (bp) contracted with Stena Drilling Ltd. for the Stena IceMax drill ship to conduct an exploratory drilling program at the Ephesus wellsite from May to June of 2023. The wellsite is located 395 km northeast of St. John's in the West Orphan Basin in Exploration License (EL) 1168 (a consolidation of EL1145 and 1146) (See Figure 1-1).

The Environmental Impact Assessment (EIS) for the drilling program was initiated in September 2018 and progressed in accordance with the requirements of the Canadian Environmental Assessment Act, 2012 (CEAA). The assessment was developed to support an application to the Canada Newfoundland Offshore Petroleum Board (C-NLOPB) for an operations authorization to conduct exploration drilling.

Following the public and regulatory review of the environmental impact statement, in a February 2020 Decision Statement, the Minister of Environment and Climate Change determined that, with mitigations, the proposed project was not likely to cause significant adverse environmental effects (IAAC 2020).

For a more detailed description of the drilling program, see Section 2.0 of the September 2018 Newfoundland Orphan Basin Exploration Drilling Program Environmental Impact Statement, which was conducted under the Canadian Environmental Assessment Act 2012 (CEAA) (registration number 80147) and can be found at the website Environmental Impact Statement - Canada.ca (<http://www.ceaa-acee.gc.ca>).

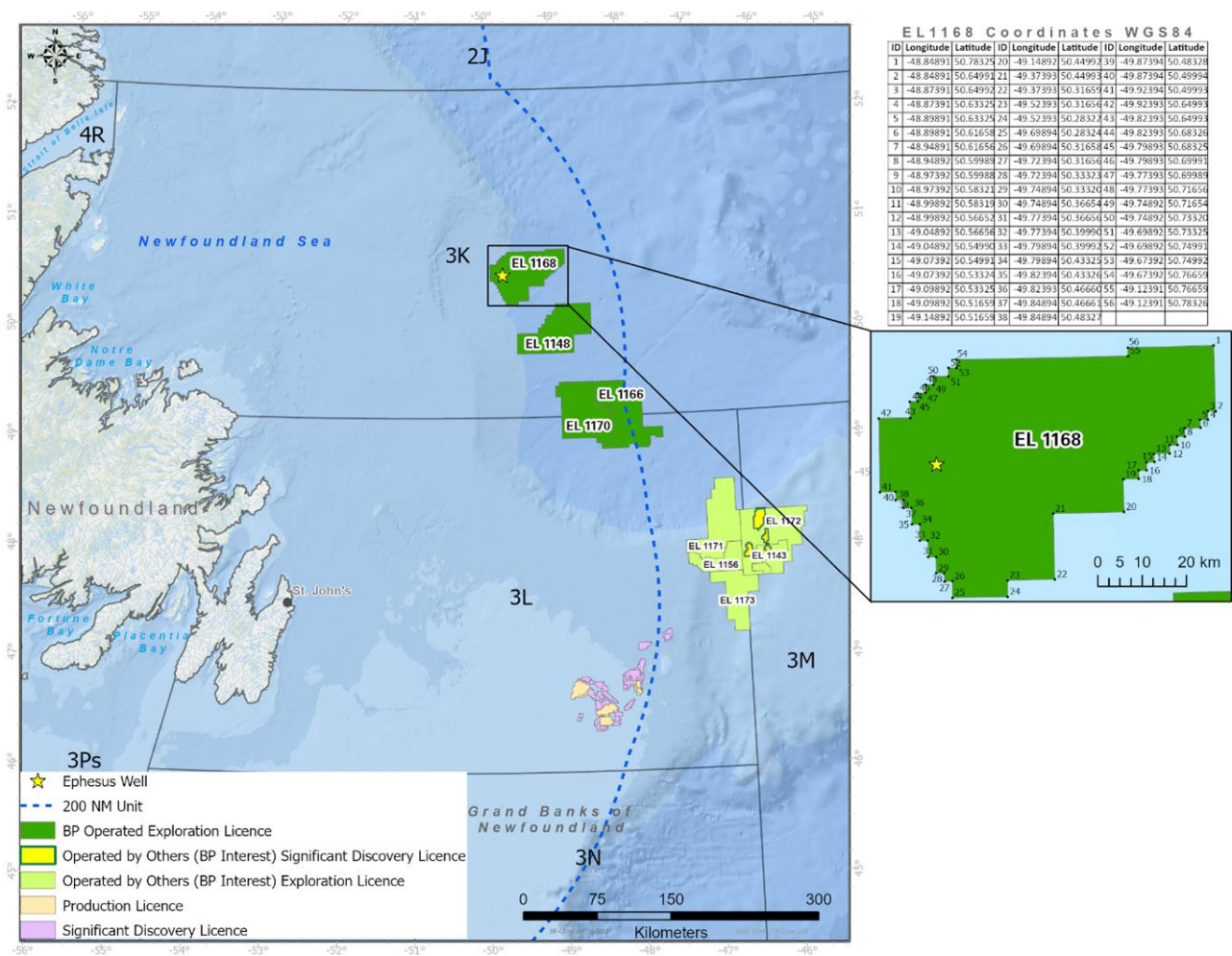


Figure 1-1: Ephesus Wellsite Within EL1168

## 1.1. Purpose

In accordance with subsection 53(2) of the CEAA, the February 2020 Decision Statement included a number of conditions in relation to the environmental effects referred to in subsection 5(2) of CEAA 2012 which bp committed to address before, during and after the drilling program.

This purpose of this report is to address Condition 2.8 which established a requirement for bp to develop an executive summary of the report describing how all conditions of the Decision Statement were addressed. The detailed requirements of Condition 2.8 can be found in Table 1-1.

**Table 1-1 EIS Decision Statement Condition 2.8**

<b>Condition</b>	<b>Condition Details</b>
2.8	The Proponent shall, within 90 days of the completion of the drilling program for a single year program, or annually within 90 days of the end of each calendar year of a multi-year drilling program, submit to the Board and the Agency a report, including an executive summary of the report in both official languages. The Proponent shall document in the report:
2.8.1	the activities undertaken by the Proponent in the reporting year to comply with each of the conditions set out in this Decision Statement;
2.8.2	how the Proponent complied with condition 2.1
2.8.3	for conditions set out in this Decision Statement for which consultation is a requirement, how the Proponent considered any views and information that the Proponent received during or as a result of the consultation
2.8.4	the information referred to in conditions 2.5 and 2.6 for each follow-up program
2.8.5	the results of the follow-up program requirements identified in conditions 3.12 and 4.3; and
2.8.6	any modified or additional mitigation measures implemented or proposed to be implemented by the Proponent, as determined under condition 2.7

## 1.2. Document Structure

The following sections of this report have a structure similar to that found in the February 2020 Decision Statement referenced above. Each section is assigned the same heading (Level1) numerical value as it appears in the Decision Statement. For each section an executive summary is presented which describes how bp complied with the key conditions of that section.

## 2. GENERAL CONDITIONS – Communications and Consultation

### 2.1. Condition Management Strategy

bp implemented a structured and disciplined approach in the identification of appropriate actions to address the Decision Statement conditions. Designated personnel were assigned responsibility for conditions applicable to their respective disciplines. This was followed by a Decision Statement review meeting with the C-NLOPB to review the conditions to confirm understanding, expectations, and to learn from past experience. The status of each condition was reviewed and discussed on a weekly basis with bp leadership and on a monthly basis with the C-NLOPB. Between the monthly meetings with the C-NLOPB, working level communications with C-NLOPB staff continued which led to a mutual understanding of desired

outcomes. bp contractually engaged experienced contractors and consultants who were familiar with the regulations, standards, requirements, and expectations to operate in the Newfoundland offshore area. As each condition was addressed, bp submitted information to the C-NLOPB which demonstrated compliance and requested concurrence from the C-NLOPB that the condition was appropriately addressed. Assigned actions were not closed within bp until C-NLOPB concurrence was obtained.

bp recognized the importance of early and ongoing engagement with Indigenous groups and stakeholders. bp believes it is important to build positive relationships with Indigenous groups and key stakeholders to facilitate the exchange of information and understand concerns and priorities so that they can be incorporated as appropriate in the planning and operation of the project. bp recognizes the potential for project activities (including potential accidental events) to affect fisheries stakeholders and Indigenous peoples and acknowledges the importance of engaging key stakeholders and Indigenous groups to communicate project details and obtain their views on potential effects of changes to the environment and potential adverse impacts of the project on commercial fisheries and asserted or established Aboriginal and/or Treaty rights.

Bp commenced consultations with regulatory bodies, Indigenous groups, and stakeholders including the fishing industry in November of 2017. Communications regarding the project continued beyond the conclusion of the project environmental assessment, which concluded in February of 2020. In preparation for the 2023 Ephesus exploration drilling program, in consultation with Indigenous groups and the fishing industry, bp developed communications plans for both groups which outlined how bp would communicate with them during project planning, operations, in the event of an incident or spill that may result in adverse environmental effects, and regarding well completion and abandonment. In September 2022, bp provided Indigenous groups and fisheries stakeholders draft fisheries communications plans for their review and comment. In November 2022, the draft Oil Spill Response Plan was issued to all groups for review and comment; the final version was provided in May 2023, along with the Spill Impact Mitigation Assessment and the Emergency Response Exercise After Action Report.

As indicated in the communications plans, a monthly operational update was sent to Indigenous and commercial fisheries groups firstly on March 13, 2023, and again in April, May, and June of 2023. Notifications were also provided pre- and post-drilling in March and June of 2023.

To facilitate external communications and the sharing of information, bp established a website dedicated to the drilling program activities [Newfoundland and Labrador | Who we are | Home \(bp.com\)](#). The site contains some background information on the project as well as key project related documents listed in condition 2.9 of the Decision Statement. Stakeholders and Indigenous Groups were notified within 48 hours of posting documents to the website.

## **2.2. Follow-up Monitoring**

Follow-up monitoring programs / studies were established to understand effects on seabirds, vertical seismic profiling effects on marine mammals, marine sound effects on marine mammals, and effects of drilling waste discharges on benthic habitat. For each of these follow-up monitoring programs, a monitoring plan was developed and submitted to the C-NLOPB, Fisheries and Oceans Canada (DFO) and Environment Canada and Climate Change – Canadian Wildlife Service (ECCC-CWS) (as applicable) for acceptance. Based on the data collected during these monitoring programs, no new mitigations were deemed necessary nor were modifications to existing mitigations. Additionally, the environmental assessment was

concluded to have been accurate as the limited effects observed were within the assessment predictions.

### **3. FISH AND FISH HABITAT**

bp identified and implemented a number of mitigations during the drilling program to ensure protection of fish and fish habitat. These mitigations included:

- Completing pre-drilling seabed (benthic fauna) survey to understand the corals and sponges present. Marine biologists with expert knowledge in deep water surveys were onboard the survey vessel to collect data on the abundance, density, and condition of corals and sponges. The Ephesus wellsite was determined to pose the least environmental risk within the survey area, thus a wellsite relocation was not necessary.
- Completing a pre-drilling sediment sampling survey to understand background sediment chemistry. Pre-drilling sediment chemistry analysis provided naturally occurring background concentrations of barium which was used as an indicator of cuttings dispersion once post-drilling samples were collected and analysed. Push core samples deployed by a remote operated vehicle (ROV) were proven to be a reliable means of sampling in the substrate conditions found at the wellsite.
- Completing a post-drilling seabed survey to collect coral and sponge data, sediment samples, and to assess the extent and thickness of cuttings – this enabled a comparison of pre- and post-drilling coral and sponge data and also enabled determination of the extent and thickness of deposited cuttings. The deposition of cuttings extent and thickness was determined by direct measurement of a cuttings layer recovered by a push core sampler and indirectly measured by difference in water depth on top of the cuttings pile versus the water depth at adjacent undisturbed seafloor using a depth sensor deployed by the ROV.
- Selecting chemicals in accordance with the C-NLOPB Offshore Chemical Selection Guidelines (OCSG) for Drilling & Production Activities on Frontier Lands. The bp Chemical Management Plan required suppliers to select lower toxicity chemicals for use and discharge into the marine environment in accordance with the C-NLOPB guidelines. Information on each chemical was provided by the suppliers to bp to verify the selection process described in the plan had been followed.
- Managing discharges of cuttings and deck drains in accordance with the C-NLOPB Offshore Waste Treatment Guidelines (OWTG). The bp Environmental Compliance Monitoring Plan required the adoption of monitoring and discharge limits described in the OWTG. There were no instances of excursions of the allowable discharge limits for either residual synthetic oil on cuttings or in deck drains.
- Applying Fisheries and Oceans Canada’s Statement of Canadian Practice with Respect to the Mitigation of Seismic Sound in the Marine Environment during vertical seismic profiling operations. The bp marine Mammal Monitoring Plan for vertical seismic profiling (VSP) operations was implemented to ensure the protection of marine mammals. VSP operations took place over a 11 hour and 21-minute period. Both visual monitoring and passive acoustic monitoring was conducted by trained and competent personnel for approximately 10 hours and 17 hours respectively. No marine mammals or sea turtles were detected approaching or entering the safety zone area that required a delay in start-up or a shutdown of ongoing operations.

- Completing underwater sound monitoring. bp developed and implemented a follow-up monitoring program to measure sound generated by the drilling of the Ephesus well to ensure the protection of marine mammals. Sound data recorders were placed on the seafloor at 1km for the well site and another at 40km from the wellsite. The recorder positioned at the 1km monitoring point did not record any data due to an equipment malfunction however the recorder located 40km away collected a full data set as planned. A report on the marine sound data collected was issued to the C-NLOPB in September of 2023 which concluded that the predictions in the environmental assessment were accurate. The EIS stated that based on previous studies, a 120 dB re 1  $\mu$ Pa threshold should be reached at 23-40 km from the wellsite. The data presented in the report confirmed the environmental assessment prediction since the recorder which collected data was positioned 40 km from the Stena IceMax.

The follow-up monitoring completed for fish and fish habitat confirmed the environmental assessment was accurate. Impact on corals and sponges was limited to the area surrounding the wellsite and cuttings dispersion was within that predicted in the environmental assessment. No new mitigations were deemed necessary nor were modifications to existing mitigations.

#### **4. MIGRATORY BIRDS**

Throughout the drilling program bp remained compliant with the Migratory Birds Convention Act, 1994, the Migratory Birds Regulations and with the Species at Risk Act and took into account the Environment Canada and Climate Change-Canadian Wildlife Service (ECCC-CWS) Avoidance Guidelines.

No flaring was planned or occurred during drilling of the Ephesus well therefore flaring related mitigations were not necessary.

In December of 2022, bp submitted a Seabird Monitoring Plan to the C-NLOPB which described monitoring mitigations to be applied to minimize risks to seabirds as well as the implementation of safe separation distances between the drilling program activities and seabird colonies. As described in the Seabird Monitoring Plan, seabird observers were placed on the Stena IceMax for the duration of the drilling program. The observers were trained and deemed competent in the application of the ECCC-CWS Eastern Canada Seabird at Sea protocol. A report on the ECSAS observation data collected was submitted to the C-NLOPB and ECCC-CWS in September of 2023. Northern fulmars were the most commonly observed seabird during the observation period.

The seabird observers placed on the Stena IceMax were trained and deemed competent in the application of the ECCC-CWS Procedures for Handling and Documenting Stranded Birds Encountered on Infrastructure Offshore Atlantic Canada and in the ECCC-CWS Guidance for Developing Systematic Stranded Bird Survey Protocols for Vessels and Platforms. Additionally, bp provided training to designated supply vessel crew members who, like the observers on the Stena IceMax, conducted daily systematic searches for stranded birds.

A seabird follow-up monitoring report was submitted to the C-NLOPB in September of 2023 which concluded that the drilling program did not cause significant adverse effects on seabirds as predicted in the environmental assessment. Mitigation measures were also stated to have been effective in that the potential mortality of stranded Leaches Storm-Petrels was reduced by 40%.



## 5. INDIGENOUS AND COMMERCIAL FISHERIES

bp developed and implemented communications plans for both Indigenous groups and for commercial fishers. Draft plans were provided to both groups in September 2022 for a four-week review period. The final versions of the plans were provided to both groups in November of 2022. The plans described procedures to notify both groups on planned drilling activity as well as the process to be applied to determine if a Fisheries Liaison Officer and/or fisheries guide vessel would be necessary. The plan also described the communications to occur in the event of an accident or malfunction having potential to cause adverse environmental effects.

The communications plans indicated bp would provide monthly operation updates which reflected details on ongoing and upcoming activities. A monthly operational update was sent to Indigenous and commercial fisheries groups firstly on March 13, 2023, and again in April, May, and June of 2023. A notification of the conclusion of drilling was issued to all groups in late June 2023. The plans included details on the safety zone, marine traffic routes and scheduling as well as wellhead abandonment.

bp participated in Atlantic Salmon research through the Environmental Studies Research Fund (ESRF). The annual Atlantic Salmon update, issued by the ESRF was provided to Indigenous groups in February 2023.

Notifications to Indigenous groups, the Canadian Coast Guard Marine Communications and Traffic Services and the Canadian Hydrographic Services regarding permanent hazards to navigation were not required at the wellhead was not abandoned in-situ but was cut and recovered by the Stena IceMax. bp provided the Well Abandonment Plan to fisheries and Indigenous groups in advance of drilling activities.

No incidents of spills or interactions with fishing gear, marine mammals, or sea turtles occurred during the drilling program thus the associated required notifications were not necessary.