



# Seabird Data Summary Bay du Nord C-78Z April 09, 2020 to April 23, 2020

Facility: Transocean Barents

**Position:** 47°56.58' North

046°26.54' West

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## 1.0 INTRODUCTION

Equinor Canada Ltd. (Equinor) contracted PAL Aerospace Ice and Environmental Services to provide environmental and seabird and mammal monitoring services supporting operations on the Bay du Nord C-78Z well site (Figure 1) from April 09, 2020, at 1155z to April 23, 2020, at 2220z.

During this time, the Transocean Barents (Figure 2) was staffed with PAL Aerospace's Offshore Ice and Environmental Observers/Specialists as the Marine Mammal, Sea Turtle, and Seabird Observers (MMSTSO), by request of the operator. They conducted three seabird surveys daily and visual observations for marine mammals; all following the Geophysical, Geological, Environmental and Geotechnical Program Guidelines (C-NLOPB, 2019).

The MMSTSO was responsible for systematic searches for stranded seabirds while on the Bay du Nord C-78Z wellsite. Information provided in this report spans the entirety of the time spent on this wellsite.

All data collected on the Transocean Barents was stored in a local database at PAL Aerospace and compiled in this report. For environmental data comparison, all times and dates are in Coordinated Universal Time (UTC).





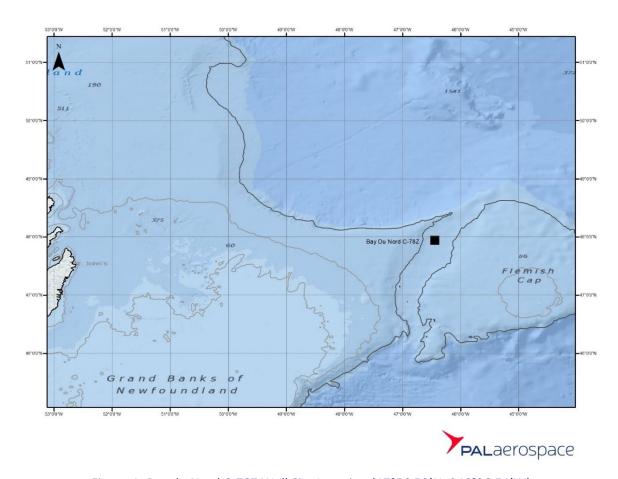


Figure 1: Bay du Nord C-78Z Well Site Location (47°56.58'N, 046°26.54'W)





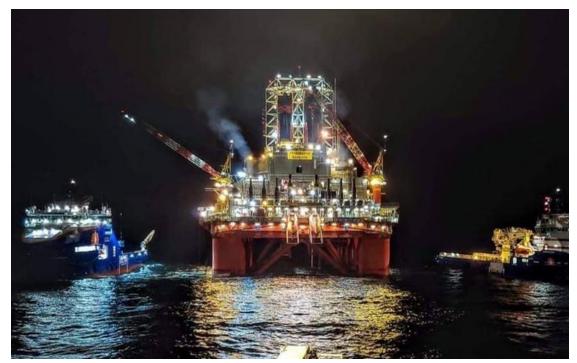


Figure 2: Transocean Barents





# 2.0 SUMMARY OF SEABIRD SURVEY, HANDLING, AND OBSERVATION

Equinor Canada Ltd conducted a seabird monitoring program on the Bay du Nord C-78Z well site from April 09, 2020, when the Transocean Barents arrived on location, to April 23, 2020, when the project was completed for that well site. Observations on the Transocean Barents were conducted by the MMSTSO. These observations were completed as per the Eastern Canada Seabirds at Sea (ECSAS) Standardized Protocol for Pelagic Seabird Surveys from Moving and Stationary Platforms (Gjerdrum C., 2012) and the Seabird Survey, Handling, and Observation Protocol (Equinor, 2020).

#### 2.1 OBSERVATION PROCEDURES

- Scan a 180 arc if possible, giving priority to any birds within a 300m semi-circle (Figure 3)
- The semi-circle is broken down into 5 zones
  - A: 0 50m
    B: 50 100m
    C: 100 200m
    D: 200 300m
  - o E: >300m

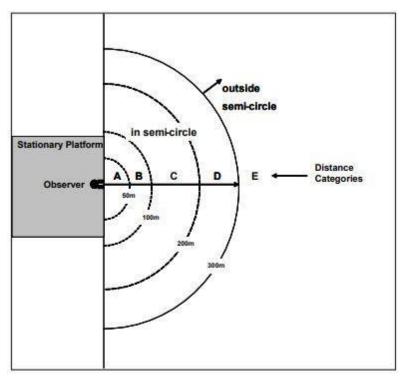


Figure 3: Seabird Observations Zones

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- Visually sweep the area, once per scan, scanning from one direction to another
- Systematically record all birds on the water and in-flight
- The survey is conducted from a position outdoors whenever possible, as close to the edge of the platform as permitted
- A position near the edge will increase the detection rates of birds, especially for birds that use the waters at the base of the platform
- If surveys are being conducted from a stationary platform, such as an oil drilling rig, the MMSTSO should scan from the same location each time to increase the comparability among scans
- In poor visibility, note how far you can see and conduct the scan anyway
- When no birds are detected during a scan, it is important to record "No birds observed."

The MMSTSO utilizes instantaneous counts of seabird occurrences and behaviour from stationary platforms at regular intervals for a total of three observations daily (from 0600 NDT to 1800 NDT). Data is collected regardless if seabirds are present or not. PAL Aerospace's environmental monitoring software, the Ice Data Network System (IDNS), records the number, species, and activities of all seabirds observed.

The MMSTSO was responsible for searching and scanning the decks for stranded and deceased seabirds twice daily. All crew members were also requested to alert the MMSTSO if stranded birds were found. The Equinor SSU Coach was available to assist the MMSTSO if needed. When stranded birds are recovered and released, the MMSTSO follows the handling methods devised by Williams and Chardine (1999).

## 2.2 STRANDED SEABIRD SEARCH PROCEDURES

MMSTSOs conduct daily inspections of the facility to search for potentially stranded birds. This survey quantifies species numbers and status (alive or dead) and the timing of migratory bird stranding in the area. This survey consists of outlining the area searched, as well as all findings in the search. Full procedures for stranded seabird searches can be found in the Seabird Survey, Handling, and Observation Protocol (Equinor, 2020).

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## 3.0 SUMMARY OF MARINE MAMMAL AND SEA TURTLE MONITORING

Visual observations on the Transocean Barents were conducted by the onboard MMSTSO during daylight hours. Observations were conducted primarily from the bridge. No sightings were observed throughout the project period on the Bay du Nord C-78Z well site.

Visual scans were made with the naked eye and with 7x50 binoculars. The detection cues that would have been used were the presence of groups of birds, unexpected splashes, blows, and black objects breaking the surface. Whenever possible, sightings would have been photographed to aid species identification.

Species are identified based upon physical characteristics and behaviours. Identification is facilitated by consulting relevant field guides and by observer experience.

If visual detections occurred, the MMSTSO would have recorded all pertinent information about the sighting within PAL Aerospace's environmental monitoring software, the IDNS.

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**REV: 12-JAN-21** 





## 4.0 RESULTS

#### 4.1 **SEABIRD SIGHTINGS**

The MMSTSOs provided by PAL Aerospace Ice and Environmental Services conducted seabird monitoring services on the Bay du Nord C-78Z well site April 09, 2020, to April 23, 2020. During this period, a total of 90 seabird observation entries recorded 2,359 individual seabirds. 29 observations (32.2% of all observations) resulted in no seabirds identified in viewing distance of the MMSTSO's facility. The most frequent individual seabird sighting was the Herring Gull (1,032 individual birds sighted, 43.7% of all birds sighted), followed by the Northern Fulmar (958 individual birds sighted, 40.6% of all birds sighted).

Table 1 and Figure 4 provide summaries of all seabird observations recorded on the Bay du Nord C-78Z location from April 09, 2020, to April 23, 2020.

Table 1: Seabird Sightings for the Bay du Nord C-78Z Well Site

Species	Number
Black-Legged Kittiwake	76
Great Black-Backed Gull	131
Glaucous Gull	10
Herring Gull	1032
Dovekie	2
Northern Fulmar	958
Unknown Gull	150
Total	2,359

Observation	Number
Total Observation	90
No Birds	29





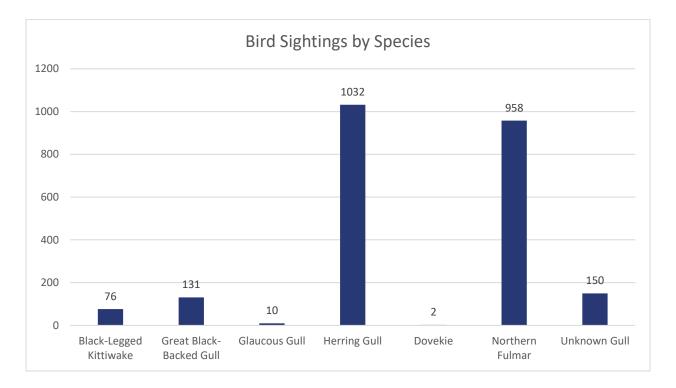


Figure 4: Seabird Sightings for the Bay du Nord C-78Z Well Site

#### 4.2 SEABIRD RECOVERY

Throughout the time that the Transocean Barents was in operation on the Sitka O-02 well site, there were no seabirds stranded or found dead onboard the facility.

#### 5.0 ENVIRONMENTAL EFFECTS OF THE SURVEY

The marine mammal, sea turtle, seabird observations and stranded seabird checks summarized in this report demonstrate that appropriate monitoring procedures were implemented during the project, including following the requirements in the Canadian Statement of Practice (Government of Canada, 2016).

#### 6.0 SUPPLEMENTARY DIGITAL DATA

The following data has also been provided for this report:

- The Seabird Spreadsheet: Spreadsheet outlining all data and statistical analysis completed (April 09, 2020 – April 23, 2020);
- The Seabird Search-Forms: Forms identifying numbers for seabird observations performed. (Please note that data in these forms also includes observations from before and after the





- Transocean Barents arrived on the Bay du Nord C-78Z wellsite. These observations have not been included in the statistical analysis for the purpose of this report.);
- The Seabird Daily Report: Form identifying numbers for seabird searches performed (October 22);
- ECSAS Access Database: The active database with all observation information recorded. (Like the
  forms, the database also includes data from before and after arrival on the Bay du Nord C-78Z
  wellsite.); and,
- All forms filled out by the observer.

# 7.0 WORKS CITED

- Chardine, U. W. (1999). Leach's Storm-petrel (Oceanodroma leucorhoa). A Handbook on Release Techniques Prepared for Workers on the Terra Nova Oil Field.
- C-NLOPB. (2019). Geophysical, Geological, Environmental and Geotechnical Program Guidelines. June 2019. C-NLOPB.
- Equinor Canada Ltd. Newfoundland (2020). Seabird Survey, Handling, and Observation Protocol.
- Gjerdrum, C. D. F. (2012). Eastern Canada Seabirds at Sea (ECSAS) standardized protocol for pelagic seabird surveys from moving and stationary platforms. Canadian Wildlife Service Technical Report Series No. 515.
- Government of Canada, Fisheries, Oceans Canada, and Communications Branch. 2016. "Statement of Canadian Practice with Respect to the Mitigation of Seismic Sound in the Marine Environment." https://www.dfo-mpo.gc.ca/oceans/publications/seismic-sismique/index-eng.html.

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