



Stantec Consulting Ltd.
102-40 Highfield Park Drive, Dartmouth NS B3A 0A3

April 16, 2018
File: 121413516

Attention: Cash Fay, Regulatory Compliance and Environment Lead

BP Canada Energy Group ULC
1701 Hollis Street
10th Floor Founders Square
Halifax, NS B3J 3M8

Dear Mr. Fay,

**Reference: Scotian Basin Exploration Drilling Project – Aspy D-11 Well
CEAA Condition 3.6: Pre-drill Survey Results for Potential Aggregations of Habitat-forming Corals or Sponges, or any Other Environmentally Sensitive Features**

In accordance with Condition 3.6 of the Decision Statement Issued under Section 54 of the *Canadian Environmental Assessment Act, 2012* (CEAA) for the Scotian Basin Exploration Drilling Project (the Project), BP Canada Energy Group ULC (BP) conducted a predrill survey of the seafloor on and around the proposed Aspy D-11 wellsite (UTM Zone 20, Northing 4745644.76 m, Easting 720856.41 m). The survey was conducted using a remotely operated underwater vehicle (ROV) for the purpose of identifying the presence or absence of any aggregations of habitat-forming corals or sponges, or any other environmentally sensitive features.

BP engaged Stantec Consulting Ltd. (Stantec) to review the live ROV video and provide an independent, qualified professional opinion on the benthic habitat results for the presence of habitat-forming coral or sponge aggregations, or any other environmentally sensitive features at the well location. This letter documents the review undertaken by Stantec's Dartmouth office marine scientist, Sam Salley on April 14, 2017.

The survey began at 10:54 and ended at 22:27 on April 14, 2018. The ROV surveyed a 500-m radius from the wellsite in eight leg patterns in 45 degree increments of the seafloor (i.e., 500-m transects in the N, NE, E, SE, S, SW, W, and NW directions from the proposed wellsite). The altitude of the ROV along each transect ranged from 2 to 3 m above the seabed and the video imagery was collected with an Ocean Pro HD camera containing a wide-angle lens. The water depth of the pre-drill survey area ranged from 2,769 m to 2,802 m at the Aspy D-11 wellsite.

No aggregations of habitat-forming corals or sponges, or any other environmentally sensitive features were identified on the seafloor within the survey area. The typical benthic habitat observed at this proposed well site is relatively bare and generally devoid of epifauna, with sparse solitary macrofauna scattered in the surveyed area, when present. Figure 1 provides an example of the habitat observed at the proposed Aspy D-11 wellsite and is indicative of the typical habitat seen throughout the survey.

April 16, 2018

Cash Fay, Regulatory Compliance and Environment Lead

Page 2 of 4

**Reference: Scotian Basin Exploration Drilling Project – Aspy D-11 Well
CEAA Condition 3.6: Pre-drill Survey Results for Potential Aggregations of Habitat-forming Corals or Sponges, or any Other Environmentally Sensitive Features**



Figure 1 Typical Benthic Habitat Found at the Proposed Aspy D-11 Wellsite (buoy marker visible in the background)

None of the macrofauna species observed are considered species of conservation interest (i.e., listed as endangered, threatened, or special concern under the *Species at Risk Act* or by the Committee for the Status of Endangered Wildlife in Canada). Table 1 presents the type of macrofauna and their relative abundance observed on the seafloor at the Aspy D-11 wellsite. Macrofauna distributions were identified over the survey area to the lowest taxonomic level possible and abundance was classified using four categories:

- Abundant, numerous (not quantifiable) observations made throughout the survey area
- Common, numerous (not quantifiable) observations made intermittently throughout the survey area
- Occasional, quantifiable observations made intermittently throughout the survey area
- Uncommon, quantifiable observations made infrequently throughout the survey area.

April 16, 2018

Cash Fay, Regulatory Compliance and Environment Lead

Page 3 of 4

**Reference: Scotian Basin Exploration Drilling Project – Aspy D-11 Well
CEAA Condition 3.6: Pre-drill Survey Results for Potential Aggregations of Habitat-forming Corals or Sponges, or any Other Environmentally Sensitive Features**

Table 1 Deep-Sea Epifauna Observed on the Seafloor at the Aspy D-11 Wellsite

Major Group / Taxon	Organism Observed	Observed Occurrence
Echinoderm - Ophiuroidea	Brittle star	Common
Echinoderm – Holothuroidea	Sea Cucumber	Occasional
Mollusc - Opisthobranchia	Nudibranch	Occasional
Octocoral - Pennatulacea	Sea pen	Uncommon
Crustacean - Decapoda	Shrimp	Uncommon
Sponge - Porifera	Glass sponge	Uncommon
Fish - Chimaeriformes	Chimaera fish	Uncommon
Fish - Gadidae	Gadoid fish	Uncommon
Fish - Ipnopidae	Tripod fish	Uncommon
Fish – Unknown	Unknown fish	Uncommon

The results of this review will be reported to the Canada-Nova Scotia Offshore Petroleum Board (CNSOPB) within 48 hours of the completion of the survey.

Closure

This letter report has been prepared by Stantec Consulting Ltd. (Stantec) for the sole benefit of BP Canada Energy Group ULC (BP). This report may not be used by any other person or entity without the express written consent of Stantec and BP.

Any use that a third party makes of this report, or any reliance on decisions made based on it, is the responsibility of such third parties. Stantec accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made, or actions taken, based on this letter report.



April 16, 2018
Cash Fay, Regulatory Compliance and Environment Lead
Page 4 of 4

**Reference: Scotian Basin Exploration Drilling Project – Aspy D-11 Well
CEAA Condition 3.6: Pre-drill Survey Results for Potential Aggregations of Habitat-forming Corals
or Sponges, or any Other Environmentally Sensitive Features**

The conclusions presented in this letter report represent the best technical judgment of Stantec based on the data obtained from the work. The conclusions are based on the site conditions observed by Stantec at the time the work was performed at the specific testing and/or sampling locations, and can only be extrapolated to an undefined limited area around these locations.

Regards,

Stantec Consulting Ltd.

Sam Salley, M.Sc.
Senior Marine Scientist
Phone: (902) 468-7777
Fax: (902) 468-9009
Sam.Salley@stantec.com

cc. Heather Giddens (BP Canada Energy Group ULC – EIA Advisor)

v:\1214\active\121413xxx\121413516_esia_offshore_drilling_bp\reporting\eis
approval\conditions\let_121413516_predrill_20180416_bp.docx