Project Notice: ExxonMobil Canada Ltd. 2024 – 2034 Eastern Newfoundland & Labrador Offshore Exploration Drilling Program, EL 1169

Submitted to:

Impact Assessment Agency of Canada

Submitted by:

ExxonMobil Canada Ltd.
20 Hebron Way
St. John's, Newfoundland and Labrador
Canada A1A 0L9

August 30, 2023

1. Introduction:

ExxonMobil Canada Ltd. (the Proponent) and its co-venturer are planning to conduct a program of petroleum exploration drilling and associated activities as described in Section 2 (Designation) of the *Regulations Respecting Excluded Physical Activities (Newfoundland and Labrador Offshore Exploratory Wells* (the Regulations). The proposed exploratory well program falls with the area described in Schedule 1 (Area of Application) of the Regulations. The Proponent is proposing to conduct an offshore exploration drilling program within Exploration License (EL) 1169 in the 2024 – 2034 timeframe. This document has been prepared and is being submitted by ExxonMobil Canada Ltd. for review by the Impacts Assessment Agency of Canada under the Regulations.

2. Information Requirements Under Section 3 of Regulations

The information in this Section 2 is provided in accordance with Section 3 requirements under the Regulations. Table 1 provides a listing of these requirements.

Table 1: Information Required Under Section 3 of the *Regulations Respecting Excluded Physical Activities (Newfoundland and Labrador Offshore Exploratory Wells)*

#	Requirements Under The Regulations
3	The person or entity that proposes the physical activity referred to in section 2 must provide the following information in respect of that physical activity to the Impact Assessment Agency of Canada at least 90 days before commencing the drilling program:
a.	Their name and contact information and the address of the Internet site on which the information referred to in section 40 of Schedule 2 will be published.
b.	A description of the activity
c.	The license number of any exploration license respecting the area in which they propose to carry out the activity.
d.	A summary of all engagement that the person or entity undertook with the Indigenous groups referred to in section 1 of Schedule 2, including issues raised and how views and issues have been considered and any future engagement that is planned.
e.	The geographic coordinates of the area in which the activity would take place described in Schedule 1 and the geographic coordinates identifying the area set out in the exploration license.
f.	The number of wells that are planned to be drilled and the planned depth of each well.
g.	A list of all activities that are associated with the drilling, testing, and abandonment and all infrastructure, structures and physical works that are necessary for those activities.
h.	A site map that illustrates the location of the elements referred to in paragraph (g) and the distance between them.
i.	A description of the processes that will be used to drill, test and abandon wells.
j.	A list of any financial support received from federal authorities in relation to the activity and of any such support for which an application has been made.

#	Requirements Under The Regulations
k.	A list of the permits, licenses or other authorizations that may be required by jurisdictions that have powers, duties or functions in relation to an assessment of the activity's environmental effects.
l.	If the activity is proposed in an area that is closed in accordance with the *Conservation and Enforcement Measures* adopted by the Northwest Atlantic Fisheries Organization, a copy of any mitigation measures that were proposed to the Department of Fisheries and Oceans.

SECTION 3 (a): ***Their name and, contact information and the address of internet site on which the information referred to in Section 40 of Schedule 2 Will be published.***

- Name: ExxonMobil Canada Ltd.
- Contact Details:
  - Ms. Shelley Sullivan
  - Title: Regulatory Affairs & Public Policy Supervisor
  - ExxonMobil Canada Limited
- Email: <Email address removed>
- Telephone:
  - Office: <Personal information removed>
  - Mobile: <Personal information removed>
- Address:
  - 20 Hebron Way
  - St. John's
  - Newfoundland and Labrador
  - A1A 0L9
- Internet Site where publication requirements identified in Section 40 of the *Regulations Respecting Excluded Physical Activities (Newfoundland and Labrador Offshore Exploratory Wells)* are published.
  - https://exploration.exxonmobilcanada.ca

SECTION 3 (b): ***A description of the activity.***

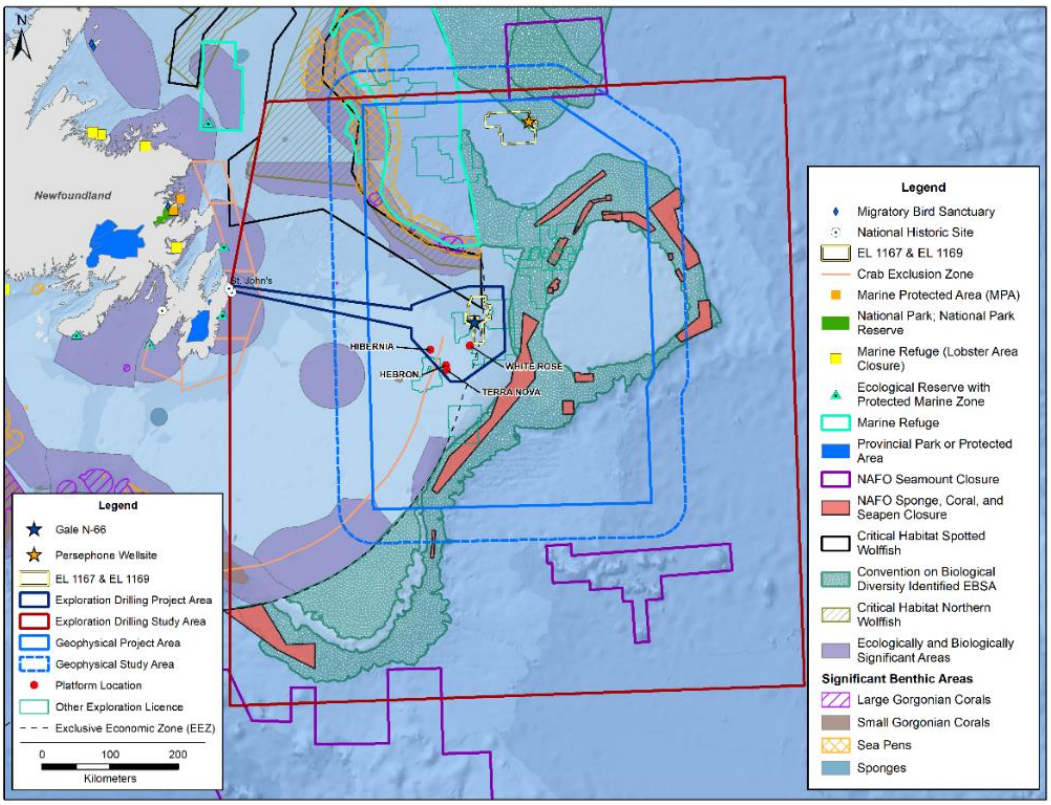
ExxonMobil Canada Ltd. is proposing to conduct an offshore exploration drilling program within Exploration License (EL) 1169 in the 2024 – 2034 timeframe. The program will consist of – i) up to five exploratory wells, ii) vertical seismic survey associated with each well, iii) potential for non-flaring well testing, and iv) delineation wells associated with each well. Full duration testing (i.e., flaring) may be necessary on delineation wells. All proposed activities are outside the Canadian 200 nautical mile exclusive economic zone on Canada's "extended continental shelf".

The first well in the exploration program is the Persephone well which is planned for the 2024 – 2025 timeframe. The Persephone well is located at the proposed position of N 49° 43' 3.59549" and W 46° 38' 16.14925" in approximately 3,000 m water depth. (Figure 1). The location of the well is

approximately 500 km from St. John's, Newfoundland and Labrador. In a success case, there is the potential for additional exploration wells located in the same EL as Persephone (EL 1169).

The anticipated duration of each exploratory well program is 75 days but subject to change depending on a number of factors and could occur at any time within the year. However, ExxonMobil Canada Ltd.'s preference is for drilling activities to be conducted in the May to October period due to more favourable weather conditions. If required, short duration well testing would take up to 4 days but a full duration well test (i.e., flaring) is not planned for any of the exploration wells. Full duration testing may be necessary on the appraisal wells. Well abandonment would be undertaken subsequent to drilling and/or well testing and comply with requirements outlined in Section 38 of the Regulations and in the *Newfoundland Offshore Petroleum Drilling and Production Regulations (SOR/2009-316)*.

Figure 1: Persephone Well Location



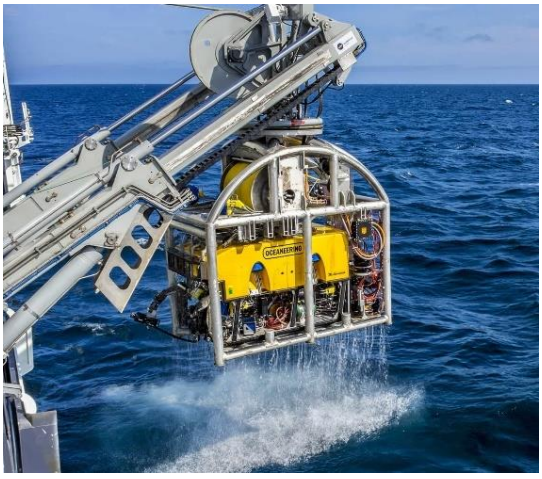
Each exploration well in the proposed program would include drilling, well testing, well abandonment or suspension and associated supply and service activities. It is possible that future appraisal drilling (i.e., delineation drilling) may occur.

For each well in the exploratory program, a vertical seismic profile (VSP) will be conducted. The purpose of the VSP is to correlate the results from a previous 3D seismic survey to the actual drilling depth. The VSP enables the acquisition of time, depth and velocity information for the formations in which drilling has been completed. Under one scenario, receivers are placed in the borehole of the well and a sound source is deployed, usually from the drilling platform into the water column at a pre-

determined depth. Another option would be to place the sound source on a vessel which then moves away from the well while activating the seismic source at pre-determined distances from the borehole receiver. VSP acquisition surveys are typically short-term activities lasting only several days with seismic source activation often limited to only a few hours. ExxonMobil Canada Ltd. will apply seismic source recommended mitigation measures as outlined in the Department of Fisheries and Oceans *Statement of Canadian Practice with Respect to the Mitigation of Seismic Sound in the Marine Environment*.

It is anticipated that a single mobile offshore drilling unit (drillship or semi-submersible) and up to five supply vessels would be required to support each exploratory well, including one standby vessel. One helicopter would be engaged in this activity. Seabed survey vessels could also be used occasionally to complete short duration ROV inspections, and environmental and/or geohazard surveys as required. If the drilling program is executed during the ice season than the number of vessels required would potentially increase as additional vessels would be involved in ice management/tracking activities.

Offshore supply vessels and helicopter services for each well will likely be based in St. John's, NL. These services will be procured from existing, established third party suppliers that service the offshore oil and gas sector, and will travel in an essentially straight line between the drill rig operating within the EL and an established port facility. It is anticipated that there will be three to four vessels transiting to and from the drilling unit per week during the course of drilling the five proposed exploration and delineation wells.



As required under the Regulations, ExxonMobil Canada Ltd. will conduct a seabed investigation survey at the Persephone well location in the August – October 2023 timeframe. The study will consist of three activities – i) pre-drill study, ii) seabed hazard survey, and iii) seabed investigation study. This study includes confirming the absence of shipwrecks, debris on the seafloor, unexploded ordnance, submarine cables and sensitive environmental features (e.g., corals, sponges, species at risk). If any environmental or anthropogenic sensitives are identified during the survey, ExxonMobil Canada Ltd. will notify the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) of the findings and discuss the appropriate course of action. Courses of action could include further investigation and/or movement of the wellsite if feasible to do so. The

survey will also provide baseline data for coral, sponge and sensitive benthic habitat that may be present. Information will be used to inform discussions on potential follow-up and monitoring with respect to drill waste discharge. While Conditions 10, 11 and 12 of the Regulations outline the requirements for this activity, this work is typically part of the planning for execution of any exploratory well. The work will be carried out using a supply vessel equipped with an underwater Remotely Operated Vehicle. The surveys referred to in this paragraph will be carried out as per regulatory requirements.

All drilling units and vessels that are used for exploratory drilling program will meet the operational and environmental capabilities needed for the exploration activity, including for implementing relevant environmental mitigations and safety and emergency response procedures, and will be compliant with all applicable legislation and regulations.

SECTION 3 (c): ***The license number of any exploration license respecting the area in which they propose to carry out the activity.***

The ExxonMobil Canada Ltd. 2023 – 2034 Eastern Newfoundland and Labrador Offshore Exploration Drilling Program, EL 1169 will occur within the area of offshore Exploration License (EL) 1169.

Section 3 (d): ***A summary of all engagement that the person or entity undertook with the Indigenous groups referred in in Section 1 of Schedule 2, including issues raised and how views and issues have been considered and any future engagement that is planned.***

ExxonMobil Canada Ltd. engaged Indigenous groups in Newfoundland and Labrador, Nova Scotia, New Brunswick, Prince Edward Island, and Quebec. Initial engagement activities covered the period of June 29, 2023 to August 15, 2023 and included the following:

1. June 29, 2023: Project description document entitled "*ExxonMobil Canada Ltd. Eastern Newfoundland Offshore Exploration Drilling Project Overview – EL 1169*" was emailed to all 41 Indigenous groups outlined in the Regulations.

2. June 29, 2023: Covering email accompanied the project description document. Email contained the following – i) notification of ExxonMobil's submission related to the proposed exploration program, ii) provided an overview of the scope of the project, iii) asked for any initial comments, concerns or questions, iv) requested response on whether or not further engagement would be required and, if so, what form would that engagement take, and v) commitment for a follow-up phone call from ExxonMobil to each Indigenous Group within a week to discuss the proposed activity.

3. July 14, 2023: Due to change in well position, an updated project description was forwarded to all 41 Indigenous groups and representing organizations.

4. June 29, 2023 – Jul 30, 2023: During this period multiple phone calls and messaging took place between ExxonMobil and various Indigenous groups. This included follow-up emails and phone calls and discussions with two Indigenous organizations around establishing virtual meetings to discuss the proposal in more detail and ensuring that appropriate community representatives were engaged.

5. August 22, 2023: Meeting held between ExxonMobil Canada Ltd. (EMCL) and Mi'gmawe'l Tplu'taqnn (MTI). MTI is an Indigenous organization representing nine Mi'gmaq communities in New Brunswick. Topics discussed at the meeting included – i) overview of the EMCL proposed exploratory program, ii) discussion on Regulations Respecting Excluded Physical Activities (Newfoundland and Labrador Offshore Exploratory Wells), and iii) engagement activities and protocols. Specific issues and concerns were not raised at the meeting. MTI advised EMCL that the exploration program is currently under review and comments will be provided within two weeks.

6. August 24, 2023: Meeting held between ExxonMobil Canada Ltd. and the Wolastoqey Nation NewBrunswick (WNNB). MNNB is an indigenous organization representing five Indigenous communities in New Brunswick. Topics discussed at the meeting included – i) an overview of the EMCL proposed exploratory program, ii) discussion on *Regulations Respecting Excluded Physical Activities (Newfoundland and Labrador Offshore Exploratory Wells*), iii) engagement activities and protocols. Discussion revolved around engagement protocol and next steps in the process. The proposed activity is under review within WNNB and specific issues and concerns will be communicated when the review is complete.

7. In addition to the outreach actions identified in points one to five above, additional actions taken by ExxonMobil Canada Ltd. related to Indigenous engagement include the following:

    i. Engaged the services of a specialist experienced in facilitating Indigenous engagement to assist with planning, preparation of material, participating in IG activities and providing advice.
    ii. Reviewed the issues identified by the various Indigenous Groups in previous environmental assessments for projects and for the *Regional Assessment of Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador*.

To date, no issues of concern have been raised by Indigenous groups with regards to the proposed exploratory program. Engagement has been ongoing and meetings have been held with two Indigenous groups. In addition, one other Indigenous group has informed ExxonMobil that the proposal is under active review and response will be provided. ExxonMobil will continue to engage with Indigenous groups and is committed to engage in a meaningful manner and respond to all issues and concerns raised.

Section 3 (e): *The geographic coordinates of the area in which the activity would take place described in Schedule 1 and the geographic coordinates identifying the area set out in the exploration license.*

The EL 1169 exploratory well (i.e., Persephone) is located in Exploration License EL 1169 on Canada's extended continental shelf. The well's surface location is the proposed position of N 49° 43" 3.59549" and W 46° 38' 16.14925". The corner points for EL 1169 area provided below in Table 2.

Table 2: EL 1169 Geographic Coordinates"

Latitude	Longitude
50°00'N	46°30'W
50°00'N	46°45'W
50°00'N	47°00'W
50°00'N	47°15'W
49°50'N	46°15'W
49°50'N	46°30'W
49°50'N	46°45'W
49°50'N	47°00'W
49°50'N	47°15'W
49°50'N	47°30'W
49°40'N	46°15'W
49°40'N	46°30'W
49°40'N	46°45'W
49°40'N	47°00'W
49°30'N	46°30'W
49°30'N	46°45'W
49°30'N	47°00'W

Section 3 (f): ***The number of wells that are planned to be drilled and the planned depth of each well.***

There is only one exploratory well planned to be executed in 2024 or 2025 for the EL 1169 Exploratory Drilling Program (i.e., Persephone), however, there is a potential total of 5 exploratory wells planned for the Exploration License. The water depth at the first well location (i.e., Persephone Well) is 3,000 m and the total depth (TD) for the well is approximately 5,700 m. Exact locations for the other four exploratory wells have not yet been determined pending completion of seismic surveys and data analysis. All wells will be located within EL 1169 in water depths comparable to the location of the Persephone well (3,000 m).

Section 3 (g): ***A list of all activities that are associated with the drilling, testing, and abandonment and all infrastructure, structures and physical works that are necessary for those activities.***

Activities that are associated with the drilling, testing and abandonment of exploratory wells and all infrastructure, structures and physical works that are necessary for those activities include the following:

- Routine Activities Associated with Drilling Program:

  - Wellsite seabed investigation survey.
  - Presence/operation of a mobile offshore drilling unit (i.e., drillship or semi-submersible) including drilling, safety zone, lights and sound associated with the operation of that facility.
  - Vertical Seismic Profiling (VSP).
  - Well testing and evaluation.
  - Well decommissioning, abandonment or suspensions.
  - Other associated survey activities such as geochemical, geotechnical and environmental.
  - Supply and servicing including vessels and aircraft traffic to and from the drill rig.

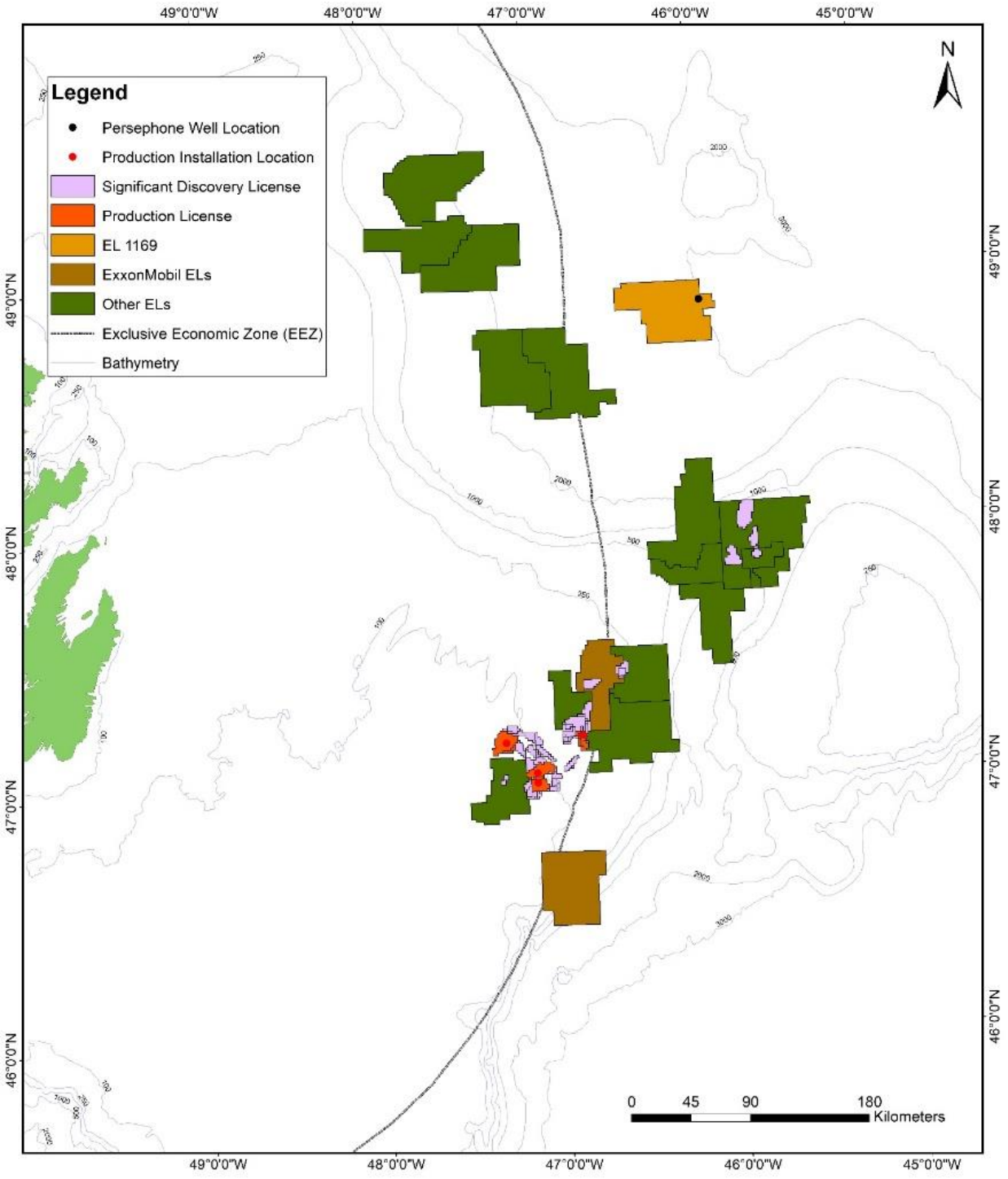
- Infrastructure, Structures and Physical Works Associated with the Drilling Program:
  - Wellhead and steel casing (cemented on seabed)
  - Riser system
  - Blowout preventer
  - Cement plugs following well abandonment.

- The project scope includes contingency planning for spill response in the unlikely event of an accidental event:
  - A blowout (uncontrolled release of hydrocarbons during drilling).
  - Semi-submersible or drill ship and vessel batch spills and releases (e.g., hydraulic fluid, drilling mud, diesel).
  - Potential loss of hydrocarbons during well testing.

Section 3 (h): *Site map indicating elements referred to in paragraph (g) and distance between them.*

Figure 2 provides a site map that illustrates the location of the Persephone Well in Exploration License EL 1169. Each of the routine activities identified in 3 g) above will occur entirely within EL 1169. Supply and servicing, which includes vessel and helicopter traffic, will occur between St. John's and the well location which is approximately 500 kms from shore base. The only assets within EL 1169 during the drilling program will be the drill rig, accompanying standby vessels and routine helicopter and supply vessel traffic.

Figure 2: EL 1169 and Persephone Well Location Map



Section 3 (i): ***A description of the processes that will be used to drill, test and abandon wells*.**

Overview of Drilling Process

The Persephone well will be drilled using either a drill ship or a semi-submersible. The actual well will be drilled using a drill bit. This drill bit will be controlled from the drill rig which will be attached to a series of pipes which are referred to as the drill string. As the wells become deeper, there will be a progressively smaller diameter of casing and pipes used. Drilling mud or fluid would be required to lubricate the drill bit, maintain wellbore pressure and move the drill cuttings up the wellbore. Different types of muds (e.g., water-based mud, synthetic-based-mud) would be used depending on well design and anticipated geological conditions. Drilling muds include a base fluid, weighting agents, and other chemicals.

In the case of the Persephone well, drilling will be divided into two stages – riserless and riser drilling. The "riser" is a pipe that connects a drilling installation on sea surface to the well on the seafloor, creating a conduit for the circulation of drilling mud and cuttings down the drill string and back up to the drill ship or semi-submersible for treatment and disposal. Treatment typically involves separating the drill cuttings from the drilling fluid. The majority of the drilling fluid would be reconditioned and reused, while any spent synthetic based mud (SBM) would be returned to shore for disposal or recycling. Following treatment offshore, a small portion of the synthetic-based mud may remain in the drill cuttings and discharged. Discharge limits are governed by the *Offshore Waste Treatment Guidelines* and discharge of cuttings containing low levels of SBMs have been demonstrated to be of minimal concern by both scientific research and environmental effects monitoring programs from operations on the Grand Banks. The upper section of the well (i.e., conductor and/or surface hole) would be drilled without a riser (riserless) and this activity would be carried out using Water Based Mud (WBM). The WBMs, cuttings and excess cement would be released directly to the seafloor. Once the initial sections have been drilled, a wellhead is installed then a blowout preventer and a riser would be connected to the wellhead. When this connection is made, mud and cuttings are recirculated back to the drill rig where they will be treated and discharged.

Well Design & Well Testing

Well Design depends on several factors including the geology of the formations. Once confirmed, the design for the well will be provided to the C-NLOPB for review and approval as part of the Operations Authorizations (OA) and Approval to Drill a Well (ADW) processes. In anticipation of the need for a well test to be conducted, a well test program will be written and provided to the C-NLOPB for review and approval as part of the ADW process. If conducted, the well test program may extend the duration of the well by 10 days. This well test program will evaluate alternatives to formation flow testing with flaring such as "Formation Testing While Tripping".

Operational Discharges

Potential operational discharges associated with offshore exploratory wells include noise, light, atmospheric emissions, discharges of waste such as drilling muds and cuttings, cement, blowout preventer fluid, produced water, bilge/deck water, ballast water, grey/black water, cooling water, non-routine operational liquid discharges, and solid and hazardous wastes associated with drill rig, supply vessel and helicopter operations. These waste streams are strictly controlled in accordance with plans approved by the C-NLOPB. Examples of these plans include- i) waste management plan, ii)

compliance monitoring plan, iii) offshore chemical management plan, iv) environmental protection plan, and v) oil spill response plan.

Chemicals intended for marine discharge would adhere to the C-NLOPB requirements under the *Offshore Chemical Selection Guidelines for Drilling & Production Activities on Frontier Lands* (the Offshore Chemical Selection Guidelines). ExxonMobil Canada Ltd. has prepared a chemical screening and management plan in accordance with the Chemical Selection Guidelines which governs careful selection of chemicals for use during drilling operations. In addition, the C-NLOPB *Offshore Waste Treatment Guidelines* address issues such as treatment of chemicals prior to release. Examples of regulations and guidelines that pertain to operational discharges and waste materials associated with the EL 1169 Exploratory Drilling Program are provided below. More details on guidelines and regulations are described in Table 3 and Table 4 of this document.

- Newfoundland and Labrador Management of Greenhouse Gas Act
- International Convention for the Prevention of Pollution from Ships (MARPOL)
- Environmental Protection Plan Guidelines
- Drilling and Production Guidelines
- Fisheries Act
- Canadian Environmental Protection Act
- Oceans Act
- Canada Shipping Act, 2001

Wellhead

Given that the water depth at the exploratory wells proposed for EL 1169 is approximately 3,000 m, ExxonMobil Canada Ltd. is proposing that approval be sought from the C-NLOPB to leave the wellhead in place. If this option is selected, the wellhead would be approximately 2 – 4 m in height and have a permanent footprint of less than 1 m2. All other subsea infrastructure, including the blowout preventer, would be removed.

Section 3 (j): *A list of any financial support received from federal authorities in relation to the activity any of any such support for which an application has been made*.

ExxonMobil Canada Ltd. has not received any financial support for the Persephone well drilling program and has not applied for any such financial support.

Section 3 (k): *A list of all the permits, licenses or other authorizations that may be required by jurisdictions that have powers, duties or functions in relation to an assessment of the activity's environmental effects*.

The *Physical Activities Regulations* were made under the *Impact Assessment Act*. Section 2(1) of the Physical Activities Regulations indicates those activities that are designated for review under the Regulations. Section 2(2) of the *Physical Activities Regulations* indicates that the activities that may be designated by the Minister as being excluded from the Impact Assessment Act include those referred to in section 34 of the schedule to the *Physical Activities Regulation*.

Section 34 of the schedule to the Physical Activities Regulations identifies the drilling, testing and abandonment of exploratory wells in exploration licenses issued under the Accords Act as being exempted from the Physical Activities Regulations. As a result, offshore oil and gas exploratory wells fall under the requirements listed in the Regulations. Schedule 1 of the Regulations outlines the area of application of the Regulations and Schedule 2 defines the conditions that apply to exploratory drilling activities.

Given the nature, scope and location of the Project, which will take place in the marine environment offshore eastern Newfoundland, it will not involve the development and use of any new on-land or near shore infrastructure. Therefore, it is not anticipated that provincial environmental regulatory interests will be triggered for this Project. Specifically, it is not expected that environmental assessment review and approval will be required under the NL *Environmental Protection Act* (Part X – Environmental Assessment), or that other provincial or municipal permits or authorizations will be required. This will be confirmed through discussions with relevant provincial government departments and agencies as Project planning and regulatory reviews progress.

In addition to compliance with the Regulations, exploratory wells will continue to be subject to other regulatory regimes, in particular by the lifecycle regulator, the C-NLOPB. Operators must also satisfy all requirements for the issuance of an Operations Authorization by the C-NLOPB.

Exploration drilling programs also require an Operations Authorization under the *Accords Acts*. Prior to issuing an Operations Authorization, the C-NLOPB requires the following to be issued by the proponent for exploratory wells:

- Canada-Newfoundland and Labrador Benefits Plan
- Safety Plan
- Environmental Protection Plan (including a waste management plan)
- Emergency Response & Spill Contingency Plans
- Appropriate financial authority
- Appropriate Certificates of Fitness for the equipment proposed for use in the activities

A separate Approval to Drill a Well (ADW) issued by the C-NLOPB is required for all wells drilled in EL 1169 by ExxonMobil Canada Ltd. This Authorization process involves specific details about the drilling program and well design.

There are several regulations under the *Accords Acts* that govern specific explorations or development activities. There are also various guidelines which are intended to address environmental, health, safety and economic aspects of offshore oil and gas exploration and development. Guidelines of relevance to the environmental assessment of the Persephone well drilling are – i) *Drilling and Production Guidelines*, ii) *Offshore Waste Treatment Guidelines*, and iii) *Offshore Chemical Selection Guidelines*. A listing of guidelines intended to address safety, environment and health and economic aspects of offshore oil and gas exploration and development are listed in Table 3. A summary of other potentially relevant Federal and Provincial Legislation is provided Table 4.

Table 3: Guidelines Intended to Address Environment, Health and Safety and Economic Aspects of Offshore Oil and Gas Exploration & Development

Guideline	Description
Drilling & Production Guidelines	Guidelines address each of the 91 sections of the *Newfoundland Offshore Petroleum and Production Regulations* and speak to a full range of topics associated with drilling and production projects.
Guidelines Respecting Financial Requirements	Guidelines explain the proof that an Applicant seeking an authorization should provide to demonstrate how it meets the financial requirements set out in the COGLA or *Accord Acts*.
Incident Reporting & Investigation Guideline	Guideline assists operators, employers, and others with responsibilities under Part III and Past III.I of the Accord Acts in the reporting and investigation of Incidents and other events, and submission of associated reports in a manner that complies with the requirements of the *Accords Acts* and associated regulations and the terms and conditions of Board approvals and authorizations.
Offshore Chemical Selection Guidelines	Guidelines provide a framework for chemical selection which minimizes the potential for environmental impacts from the discharge of chemicals used in offshore drilling and production operations.
Physical Environmental Guidelines	Guidelines clarify requirements for the Operators concerning the observing, forecasting and reporting of physical environmental data which appear in Federal and Provincial regulations (e.g., Newfoundland Offshore Petroleum Installation Regulations).
Benefits Plan Guidelines	The Guidelines provide guidance to assist Operators in the preparation of a Benefits Plan.
Environmental Protection Plan (EPP) Guidelines	Guideline assists an operator in the development of an EPP that meets the requirements of the *Acts* and *Regulations* and the objective of protection of the environment from its proposed work or activity.
Occupational Health & Safety Regulation Guidelines	Guideline provides clarity to operators, employers and others with statutory responsibilities in the *Accord Acts* or the *OHS Regulations*.
Safety Plan Guidelines	The objective of the guideline is to assist an operator in the development of a safety plan that meets the requirements of the *Acts* and *Regulations*.
Waste Treatment Guidelines	Guidelines aid operators in the management of waste material associated with petroleum drilling

	and production operations in offshore areas regulated by the C-NLOPB. The Guidelines outline recommended practices for the management of waste materials by operators. Waste materials include effluents, emissions, and solid wastes normally associated with operations.
Geophysical, Geological, Environmental and Geotechnical Program Guidelines	Guidelines are intended to assist proponents who wish to conduct geophysical, geological, geotechnical, or environmental programs. Guidelines also references the *Canadian Practice With Respect to the Mitigation of Seismic Sound in the Marine Environment.*

Table 4: Relevant Federal and Provincial Legislation

Legislation	Description	Applicability
Canada Shipping Act, 2001 [Transport Canada]	Canada Shipping Act 2001 is intended to promote safety in marine transportation and protect the marine environment from damage due to navigation and shipping activities.	Supply vessels and the MODU or drill ship itself (while in transit) are required to comply with the Act and associated regulations.
Canadian Environmental Protection Act, 1999 (CEPA) [Environment & Climate Change Canada]	CEPA pertains to pollution prevention and the protection of the environment and human health to contribute to sustainable development. CEPA provides a wide range of tools to manage toxic substances and other pollution and wastes, including disposal at sea.	Disposal at Sea permits (under *Disposal at Sea Regulations*) have previously not been required for exploratory drilling projects. It is not anticipated that such a permit will be required for the Persephone Well.
Migratory Birds Convention Act 1994 (MBCA) [Environment & Climate Change Canada - ECCC]	Under this *Act*, is it illegal to kill migratory bird species not listed as game birds or destroy their eggs or young. The *Act* also prohibits the disposal of oil, oil wastes or any other substance harmful to migratory birds in any waters or any area frequented by migratory birds.	The recovery of stranded birds during the exploratory drilling program may require a permit under section 4 (1) of the *Migratory Birds Regulations* pursuant to the *Act*.
Fisheries Act [Fisheries & Oceans] [ECCC administers Section 36 of the Fisheries Act]	Act contains provisions for the protection of fish, shellfish, crustaceans, marine mammals, and their habitat. Under the *Fisheries Act*, no person shall carry on any work, undertaking, or activity that results in serious harm to fish that are part of a commercial, recreational, or Aboriginal fishery, unless that activity has been authorized by the Minister. Section 36 of the *Fisheries Act* pertains to the prohibition of the deposition of deleterious substance into waters frequented by fish.	Authorization from DFO under Section 35 (2) has not been required to date for exploratory wells. It is not anticipated that an authorization under the *Fisheries Act* will be required for the Persephone exploratory well drilling program.

Legislation	Description	Applicability
Species at Risk Act (SARA) [DFO, ECCC, Parks Canada]	Act is intended to protect species at risk and their critical habitat. All activities must comply with SARA. Section 32 of the Act provides a complete list of prohibitions. vides a complete list of prohibitions. Proponents are required to complete an assessment of the environment and demonstrate that no harm will occur to listed species, their residences or critical habitat or identify adverse effects on specific listed wildlife species and their listed habitat, followed by the identification of mitigation measures to avoid or minimize effects.	Under certain circumstances, the Minister of Fisheries and Oceans may issue a permit under Section 73 of SARA authorizing an Activity that has the potential to affect a listed aquatic species, any part of its critical habitat, or the residences of its individuals. Such a permit is not anticipated to be required for the Persephone Well exploratory drilling program.
Newfoundland and Labrador (NL) *Endangered Species Act* (NL ESA). [NL Dept. of Fisheries & Land Resources]	The NL SEA provides special protection for the native plant and animal species considered to be endangered, threatened or vulnerable in the province. NL ESA falls under the responsibility of the NL Department of Fisheries and Land Resources.	No applicable permitting requirements under the NL ESA have been identified for this project.
***Regulations Establishing a List of Spill-Treating Agents*, SOR/2016-108** [Environment & Climate Change Canada - ECCC]	Minister of Environment and Climate Change Canada has determined that certain spill treating agents are acceptable for use in Canada's offshore. As a result, the C-NLOPB is able to authorize the use of one or more of the two spill treating agent products listed in Schedule 1 of these regulations to respond to an oil spill.	There are implications from this Act in the event that ExxonMobil Canada Ltd. requests permission to deploy dispersants in the unlike event of an oil spill.
Energy Safety and Security Act, S.C. 2015, c 4 [Natural Resources Canada]	This Act aims to strengthen the safety and security of offshore oil production through improved spill prevention response, accountability and transparency and amends the *Accord Acts* and the *Canada Oil and Gas Operations Act* with the intent of updating, strengthening and increasing the level of transparency of the liability regime that is applicable to spills and debris in the offshore areas.	Financial Responsibility and Financial Resources requirements. It establishes a legal framework to permit the safe use of spill-testing agents in specific circumstances. It establishes a legal framework to permit the safe use of spill-treating agents in specific circumstances.
Accord Acts & Associated Regulations & Guidelines	The *Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act* and the *Canada-Newfoundland and Labrador Atlantic Accord Implementation* Act (the *Accords Acts*) provide for joint	In the Canada – Newfoundland and Labrador Offshore Area, no exploratory activities can proceed unless the C-NLOPB has issued authorizations under the *Accord Acts*.

Legislation	Description	Applicability
	management of the Canada – NL Offshore Area and govern oil and gas activities in the region.	For projects excluded under the Impact Assessment Act, authorizations will be used when the proponent has – i) demonstrated compliance with all conditions outlined in the *Regulations Respecting Excluded Physical Activities (NL Offshore Wells*) (the Regulations), and ii) adhered to all C-NLOPB's Operations Authorizations (OA) requirements. All conditions that must be met by proponents in the Regulations will be incorporated by the C-NLOPB as a requirement of the OA.
Oceans Act [Fisheries & Oceans Canada]	Minister of DFO in collaboration with other ministers, boards and agencies of the Canadian government, with provincial and territorial governments and with affected aboriginal organizations, coastal communities and other persons and bodies (including those bodies established under land claims agreements) shall lead and facilitate the development and implementation of a national strategy for the management of estuarine, coastal and marine ecosystems in waters that form part of Canada or in which Canada has sovereign rights under international law.	Has implications for offshore oil and gas in areas such as – i) marine protected areas, ii) marine mammals and sea turtles monitoring, iii) identification of sponges, corals and ecologically sensitive areas during planning for drilling operation, and iv) use of Fisheries and Oceans Canada's *Statement of Canadian Practice with Respect to the Mitigation of Seismic Sound in the Marine Environment*
Environmental Protection Act (Part X – Environmental Assessment) of Newfoundland and Labrador [Department of Environment]	The Environmental Protection Act provides an up-to—date framework for environmental protection and preservation and contributes to the goal of sustainable development for Newfoundland and Labrador.	Given the nature, scope and location of the Project, which will take place in the marine environment offshore eastern Newfoundland, it will not involve the development and use of any new on-land or near shore infrastructure. Therefore, it is not anticipated that provincial environmental regulatory interests will be triggered for this Project.

<u>Section 3 (l)</u>: If an activity is proposed in an area that is closed in accordance with the Conservation and Enforcement Measures adopted by the Northwest Atlantic Fisheries Organization, a copy of any mitigation measures that were proposed to the Department of Fisheries and Oceans.

The Activity is not proposed in an area that is closed in accordance with the Conservation and Enforcement Measures adopted by the Northwest Atlantic Fisheries Organization.