****

**APPLICATION FOR**

**APPROVAL TO DRILL A WELL (ADW)[[1]](#footnote-1)**

|  |  |
| --- | --- |
| Operator[[2]](#footnote-2): |  |
| Well Name[[3]](#footnote-3): |  |

***Information submitted in this document is privileged under subsection 119 (2) of the Canada-Newfoundland Atlantic Accord Implementation Act (Canada) and sub-section 115 (2) of the Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act, and shall not be released or made public except as provided for in that Act.***

The Operator hereby applies for Approval to Drill a Well (ADW), pursuant to sections 10 and 11 of the *Newfoundland Offshore Petroleum Drilling and Production Regulations (SOR/2009-316)*.[[4]](#footnote-4)

The undersigned Operator’s Representative hereby declares that, to the best of his or her knowledge, the information contained or incorporated herein is true, accurate and complete.

Operator’s

Representative[[5]](#footnote-5): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Printed Name)

Job Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Instructions:**

|  |
| --- |
| 1. Instructions to assist the Operator in completing this Application are provided throughout the document in Blue font. The text in Blue font should be deleted prior to submission to the Board. 2. Once the application is completed, it should be signed and dated, using a secure electronic signature, by the Operator’s representative responsible for the drilling program. The signed electronic application (searchable PDF), as well as copies of any files and attachments associated with the application, including an MS Excel spreadsheet of any proposed well trajectory, should be submitted to the Board. Should there be issues with either obtaining a secure electronic signature or providing an electronic application, a paper copy of the signed application may be submitted under certain circumstances. 3. Provided that the application is complete and the proposed program is consistent with the *Newfoundland Offshore Petroleum Drilling and Production Regulations, SOR/2009-316* (theRegulations) and associated guidelines, approval will normally be issued within 21 days. 4. When completing this application, Operators should note that all of the requirements related to the “Operations Authorization” including Canada-Newfoundland and Labrador benefits plans, financial responsibility, safety plans, contingency plans, environmental protection plans and field data acquisition programs also apply to this approval. 5. For applications associated with development wells, reference to geologic tops and/or targeted formations within this application must agree, where applicable, with pool and/or zone names as designated by the C-NLOPB's Chief Conservation Officer. **Failure to comply will result in the return of the application and a re-start of the 21 day review period upon receipt of the revised application**. 6. Operators are referred to the Board's Data Acquisition and Reporting Guidelines and to any "Field Data Acquisition Program" filed in connection with an Operations Authorization when complying with evaluation expectations for well(s). 7. All diagrams, schematics, tables or other documents embedded within this application, or attached as an Appendix to this application, must be of high resolution for easy readability. 8. Any deviations from an approved ADW during the execution of the program should be brought to the attention of the C-NLOPB’s Well Operations Engineer as soon as reasonably practicable. In all circumstances, the C-NLOPB is to be notified prior to the implementation of any proposed change. |

## Introduction

Describe the purpose and objectives of the well (1-2 paragraphs). Please include a location map clearly showing the well location in relationship to land interests, adjacent wells and geographic boundaries.

|  |
| --- |
| *[Please type here]* |

## General Information

Complete the table:

|  |  |
| --- | --- |
| Prospect or Field Name: |  |
| Installation(s)[[6]](#footnote-6): |  |
| EL/SDL/PL Number[[7]](#footnote-7): |  |
| Operations Authorization No.[[8]](#footnote-8): |  |
| Gas Storage License No.[[9]](#footnote-9): |  |
| Estimated Water Depth[[10]](#footnote-10): |  |
| Estimated RT Elevation[[11]](#footnote-11): |  |
| Estimated TD (MD/TVD): |  |
| Target Formation(s): |  |
| Guidebase/Slot Number[[12]](#footnote-12): |  |
| Anticipated Spud Date[[13]](#footnote-13): |  |
| Estimated Duration: |  |
| Interest Holders[[14]](#footnote-14): |  |
| Estimated Cost[[15]](#footnote-15): |  |

## 

## Legal Survey Plan

For an exploratory or delineation well, embed in this section of the application, or attach as an Appendix, a “tentative survey plan”. The plan should contain the proposed coordinates of the well relative to NAD 83 (e.g., 46° 46’ 19.223” N Lat; 48° 2’ 49.548” W Long), the UTM X & Y coordinates (in metres), zone reference, the Unit and Section number and the Grid Area.

In the case of a development well where the Operator has already provided either the tentative or the final legal survey plan, indicate: “Already submitted to the C-NLOPB” and provide the Operator’s file number associated with the transmittal of the document.

|  |
| --- |
| *[Please type here]* |

## Well Operations Policies

Confirm that the well will be drilled in accordance with the Operator’s well operations policy documents listed in the application for Operations Authorization. Otherwise, identify any deviations from the Operator’s policies or procedures in respect of this well that affect regulatory compliance.

|  |
| --- |
| *[Please type here]* |

## Geological Prognosis

# Please refer to instruction 5 on page 2 when completing this section of the application.

## Technical Description

Provide a technical description of the prospect. This description should emphasize structural and depositional interpretations, identify the target formation(s) and include a discussion of the rationale for selecting the well location. The C-NLOPB will require a more detailed geological discussion for exploration and delineation wells, while less information is necessary for development wells where the geological description has previously been submitted.

|  |
| --- |
| *[Please type here]* |

## Anticipated Lithology

Provide a discussion of the anticipated lithology. For development or near-field delineation wells, where detailed lithological descriptions have previously been submitted, please reference the appropriate document on file with the C-NLOPB.

|  |
| --- |
| *[Please type here]* |

## Lithostratigraphic Chart

Insert and provide a digital (MS Excel, ascii, etc.) version of a Lithostratigraphic chart. For development wells, this should be specific to the reservoir target intervals. The targeted formation(s) should be highlighted, and the figure should be at an adequate resolution to clearly depict the geological markers. For development wells, note whether the reservoir target intervals are expected to be hydrocarbon-bearing or water-bearing.

|  |
| --- |
| *[Please type here]* |

## Prognosed Geologic Tops

Complete the table. Please ensure that the depth uncertainty associated with each top is included.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Formation/Zone** | **mRT (MD)** | **mRT (TVD)** | **mSS (TVD)** | **+/- m (TVD)** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## Target Formations

Complete the table and refer to the C-NLOPB Interpretation Bulletin 09-1 when completing the Well Classification column:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Target | Target Name | UTM Easting (metres) | UTM Northing (metres) | mSS (TVD) | Well Classification |
| 1 |  |  |  |  |  |
| 2 |  |  |  |  |  |
| 3 |  |  |  |  |  |

In the case where the drilling target is described in the form of a cube or other description, this should be illustrated.

|  |
| --- |
| *[Please type here]* |

Provide a technical description of each target formation. Structure maps are to be provided in section 5.7. Where applicable, the target will be the basis for any exploration licence validation in accordance with the license terms.

|  |
| --- |
| *[Please type here]* |

## Well Section

Where data is available from offset wells, embed in this section of the application, or attach as an Appendix:

* 1. A stratigraphic cross-section showing regional geologic markers and interpretations superimposed on a relevant suite of logs.
  2. A seismic-geological schematic showing structural and stratigraphic interpretations.

In both cases, the targeted formation(s) should be highlighted, and the figure should be at an adequate resolution to clearly depict the logs and geological markers.

|  |
| --- |
| *[Please type here]* |

## Geophysical Structure Map(s)

For development wells, embed in this section of the application, a contoured geophysical structure map for each prospective target. For exploration or delineation wells, append a high resolution digital copy of the map(s). In cases where a depth structure map is not available, a time structure map should be provided. Please state the C-NLOPB Geophysical Program Authorization number used to interpret and create the structure map(s). In instances where multiple vintages exist, please state the vintage used.

|  |
| --- |
| *[Please type here]* |

## Seismic Sections

Embed in this section of the application, appropriate seismic section(s) to depict the proposed well trajectory. The resolution should be adequate to determine the character of the horizons, well picks and structural interpretations. Please state the C-NLOPB Geophysical Program Authorization number, line number and geographic orientation for each of the seismic section(s) included. In instances where multiple vintages exist, please indicate which vintage was used.

|  |
| --- |
| *[Please type here]* |

## Well Data Acquisition Program

Development well programs should comply with the evaluation programs outlined in the field data acquisition program filed under an Operations Authorization. Exploration and delineation wells should comply with the program requirements specified in the Board’s Data Acquisition and Reporting Guidelines.

## Mud Logging Program

Provide confirmation that a mud logging program will be conducted in compliance with the Board’s Data Acquisition and Reporting Guidelines, or identify any deviations from the expectations identified in these guidelines.

|  |
| --- |
| *[Please type here]* |

## Drill Cuttings

Provide a chart, in the format depicted, defining the drill cuttings to be collected for the C-NLOPB’s purposes. Operator requirements do not need to be included.

| **Hole Section** | **Purpose** | **Sample Type/Preparation** | **Frequency[[16]](#footnote-16)** | **Destination/Comments** |
| --- | --- | --- | --- | --- |
| Lithological  Analyses | **2 sets washed and dried cuttings**  1 X 25 ml vial  1 x 15 ml vial | Specify Frequency and interval | * C-NLOPB Core Storage and Research Centre (CSRC) * C-NLOPB c/o Geological Survey of Canada (GSC) |
| Micropaleontological  Analysis | **1 set unwashed dried cuttings**  500g inplastic lined cloth bag (If mud other then WBM is used ensure samples are completely dried prior to shipping) | Specify Frequency and interval | * C-NLOPB CSRC   (Samples sent for processing prior to delivery to CSRC) |
| Geochemical  Analysis | **1 set unwashed cuttings**  500g in 1L plastic container with water, 1cm air space and 4 drops bactericide | Specify Frequency and interval | * C-NLOPB c/o GSC |
| Fluid Analysis | **1 Fluid Sample**  1L Sample Minimum  Only necessary if a drilling fluid other then WBM is used and must be collected prior to the final logging run. | 1 per hole section | * C-NLOPB CSRC |

## Conventional Coring and Logging

Complete the attached Table 1 respecting the conventional coring and logging components of the well evaluation program. Any deviations from the Data Acquisition and Reporting Guidelines (exploration and delineation wells) or current approved Field Data Acquisition Program (development wells) should be noted. These items should be accompanied by rationale supporting the change.

## Formation Flow Tests

For development wells, provide confirmation that formation flow testing will be conducted in compliance with Operator policies and procedures that were described during the Operations Authorization process. Otherwise indicate any deviations from those policies and procedures.

For exploration or delineation wells, indicate if formation flow testing is planned, including any plans to defer testing of the well by suspending the well for re-entry and testing at some point after completion of drilling operations. Please note that, for exploration or delineation wells, a separate approval is required for formation flow testing pursuant to section 52 of the Regulations.

|  |
| --- |
| *[Please type here]* |

## Flaring Operations

In the case of a MODU using a testing spread, the application should address the safety and environmental protection issues associated with flaring during well clean-up or testing operations. In this respect, provide a description of the measures that will be implemented to prevent hydrocarbon spills to the sea that includes but is not necessarily limited to:

* any “pre-flare” meetings, tool-box talks and other activities to ensure that relevant personnel understand their roles and responsibilities with respect to spill prevention;
* any “pre-flare” checklists that will be utilized to ensure that all appropriate spill prevention initiatives have been taken prior to initiating flaring operations;
* the measures that will be in place to prevent non-combustible fluids from going to flare and causing a spill;
* the protocol that will be in place to ensure that flaring operations are immediately suspended in the event of a spill;
* the measures that will be in place to maintain a flare watch for the early detection of any spill;
* any other measures that will be implemented to prevent spilling hydrocarbons to the sea with particular emphasis on any lessons learned from previous flaring operations; and
* a description of any specific initiatives to be taken onboard either the drilling installation or the supply vessels to heighten readiness to respond to a spill of hydrocarbons.

In the case where a description of spill preventative measures during flaring operations has previously been provided to the C-NLOPB, a reference to the document(s) that contains those provisions may be made in lieu of describing them in this application.

|  |
| --- |
| *[Please type here]* |

## Drilling Program

## 7.1 Rig Positioning

Where the drilling installation is a MODU, provide a brief summary description of the rig move and positioning plans.

|  |
| --- |
| *[Please type here]* |

## 7.2 Shallow Hazards

Complete the following table:

|  |  |
| --- | --- |
| Wellsite Survey Report: | Include title, date and report number |
| 2DHR/3DHR C-NLOPB Geophysical ProgramAuthorization number: | Where applicable |
| Seismic Data File Name: |  |
| PWL Inline Number: |  |
| PWL Crossline Number: |  |

Provide a narrative summary regarding the nature of the seabed and any shallow hazards identified (or lack thereof) together with the Operator’s plans to mitigate these hazards. Particular emphasis should be placed on describing any nearby amplitude anomalies (or lack thereof) in relation to potential shallow gas hazards or other shallow hazards, together with the steps to be taken to avoid/mitigate any identified hazards.

Depending on the line spacing of the survey, additional 3D seismic lines may have to be submitted as outlined in the Board’s Geophysical, Geological, Environmental and Geotechnical Program Guidelines.

In instances where reprocessed 3D is utilized for shallow hazard assessment, please provide a copy of the reprocessed 3D dataset if a copy has not previously been submitted.

In the case of jack-ups, the results of any geotechnical engineering assessments should be summarized.

In the case of a fixed permanent structure, where shallow hazards have previously been assessed prior to the installation of the structure, this should be indicated, as well as reference to the documents that were submitted to C-NLOPB, together with any hazard mitigation measures.

1. Amplitude Anomalies and Associated Mitigation Measures

|  |
| --- |
| *[Please type here]* |

## 2) Other Hazards and Associated Mitigation Measures

Provide a summary of all other subsurface drilling hazards identified during the well design process, with emphasis on how the well has been designed or mitigations have been implemented to cope with these hazards. The discussion should include, to the extent applicable, wellbore instability, faults, overpressure, lost circulation, hydrocarbon bearing formations, H2S and any other subsurface hazards.

In the case of a development well, hazards may be discussed in the context of the evolution of the design of the wells based on lessons learned throughout the delineation and development drilling program and in the context of any hazards unique to the well.

Where the mitigation plans are included in the Operator’s drilling operations or policy manuals, these manuals should be referenced.

|  |
| --- |
| *[Please type here]* |

## 7.3 Drilling-Time Curve

Embed in this section of the application, or provide as an Appendix, a time-depth curve for the well. If the drilling program plan includes suspending the well before all drilling activities are completed, then this should be reflected in the time-depth curve.

|  |
| --- |
| *[Please type here]* |

## 7.4 Directional Plan

The directional plan should be provided as an MS Excel spreadsheet with well path interpolated at 30mMD intervals. The minimum required parameters include measured depth, inclination and azimuth, although other parameters may be provided at the Operator’s discretion. If the application is for an exploration well, and the well trajectory crosses from one licence to another, then this section of the application should also identify the measured depth at which the well trajectory will cross over the boundary for the two licences.

The directional plan should contain both surface location and proposed bottom hole coordinates. In the case of an onshore-to-offshore well, plan should identify the measured depth at which the well enters the offshore area.

|  |
| --- |
| *[Please type here]* |

## 7.5 Formation and Fracture Pressures

Embed in this section of the application, or provide as an Appendix, a plot illustrating the anticipated pore pressure, planned mud weight and fracture gradient profiles for the well and provide a narrative description of the basis of the pore pressure/fracture gradient prediction.

|  |
| --- |
| *[Please type here]* |

## 7.6 Hole Sizes and Depths

Complete the table below. In the case where contingency hole sizes are an option; this should be described in the comments section below.

|  |  |  |  |
| --- | --- | --- | --- |
| **Bit Size (mm)** | **Anticipated Total Depth** | | **Max Anticipated Formation Pressure** |
| **mRT (MD)** | **mRT (TVD)** | **(MPa)** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Comments:

|  |
| --- |
| *[Please type here]* |

## 7.7 Casing Design

For each proposed casing string, complete the table below. If this application is for a sidetrack, then the ODs, weights and grades of the existing casing strings, that will form part of this well, should also be provided. In the case where contingent casing strings are planned, this should be either included in the table or described in the comments section following the table below.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Interval mRT MD (mRT TVD)** | | | **Outer Diameter (mm)** | | **Weight**  **(kg/m)** | **Grade** |
|  | | |  | |  |  |
|  | | |  | |  |  |
|  | | | | | | |
| **Burst** | **Design Summary** | | | **Comments[[17]](#footnote-17)** | | |
| Highest Load (kPa) |  | |  | | |
| Rating (kPa)[[18]](#footnote-18) |  | |
| Safety Factor |  | |
|  | | | | | | |
| **Collapse** | **Design Summary** | | | **Comments17** | | |
| Highest Load (kPa) |  | |  | | |
| Rating (kPa)18 |  | |
| Safety Factor |  | |
|  | | | | | | |
| **Tensile** | **Design Summary** | | | **Comments17** | | |
| Highest Load (daN) |  | |  | | |
| Rating (daN)18 |  | |
| Safety Factor |  | |

Comments:

|  |
| --- |
| *[Please type here]* |

## 7.8 Well Summary Schematic

Embed in this section of the application, or attach as an Appendix, a schematic of the proposed well illustrating the hole sizes, casing program, proposed tops of cement and such other information as may be necessary to illustrate the proposed well design.

|  |
| --- |
| *[Please type here]* |

## 7.9 Well Barrier Schematic

Embed in this section of the application, or attach as an Appendix, the individual well barrier diagrams for the various stages of the operation. There should be a separate diagram included for any stage at which the well barrier envelopes would be re-defined. These diagrams should include all well control equipment installed on the well, defined primary and secondary well barrier envelopes, a list of each element within the barrier envelope, and note the criteria used to validate it.  (Reference the NORSOK Standard D-010 for further guidance.)

Note: During drilling phase WBS is not expected to be submitted for each section.

## 7.10 Drilling Fluids Program

Complete the following table:

|  |  |  |
| --- | --- | --- |
| **Hole Size**  **(mm)** | **Mud Type**  E.g., Seawater w/ PHG sweeps (SBM, etc…) | **Proposed Density**  **(kg/m3)** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

## 7.11 Drilling Fluids Justification

In the event that a drilling fluid other then water based mud is being used in any hole section, provide a statement justifying the use of that drilling fluid.

|  |
| --- |
| *[Please type here]* |

## 7.12 Cementing Program

Complete the table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **OD**  **(mm)** | **Cement Classification** | **Slurry Density (kg/m3)** | | **Proposed Top of Cement** | |
| **Lead** | **Tail** | **mRT (MD)** | **mRT (TVD)** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

Describe below the basis for the proposed top of cement and any other special or unique aspects to the noted cementing program:

|  |
| --- |
| *[Please type here]* |

Describe below, the plans for centralization of the casing over the cemented interval, describing the placement interval(s), the minimum standoff achieved, and the type of centralizer used:

|  |  |  |  |
| --- | --- | --- | --- |
| **OD**  **(mm)** | **Depth Interval** | **Centralizer** | **Minimum** |
|  | **placement** | **standoff** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

|  |
| --- |
| *[Please type here]* |

## 7.13 BOP Stack

Complete the table:

|  |  |  |
| --- | --- | --- |
| **Component** | **Size (mm)** | **Rating (kPa)** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

Describe below any planned changes to BOP configuration/sizes throughout the planned work scope:

|  |
| --- |
| *[Please type here]* |

## 7.14 Casing Pressure Tests

Complete the following table:

|  |  |  |  |
| --- | --- | --- | --- |
| **OD**  **(mm)** | **Pressure Surface Test Pressure (kPa)** | **Anticipated Fluid Column Density (kg/m3)** | **Comments** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Notes:

1. Indicate the proposed applied surface pressure as well as the fluid density anticipated during the test.
2. In the comments section, describe the basis for the proposed pressure test in terms of the worst case load condition that the test is based on.
3. Note in comment section if the seal assembly is not tested to at least the same value as the casing.

## 7.15 BOP Equipment Pressure Tests

Complete the table (pressures should be provided in kPa).

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Hole Section**  **(mm)** | **Annulars** | | **Pipe Rams** | | **Shear Rams** | | **C&K Failsafe Valves** | |
| **Low**  **(kPa)** | **High**  **(kPa)** | **Low**  **(kPa)** | **High**  **(kPa)** | **Low**  **(kPa)** | **High**  **(kPa)** | **Low**  **(kPa)** | **High**  **(kPa)** |
| Stump |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

Describe below plans associated with testing the secondary emergency BOP systems subsea.

|  |
| --- |
| *[Please type here]* |

## 7.16 Sequence of Operations

Provide, at a high level, the step-by-step sequence of operations for the proposed drilling program, including planned pressure tests of BOPE and casing strings. (The level of detail should typically include 10-15 steps). If the well is to be suspended before completion of all drilling activities, or if more than one drilling facility is to be used to complete the drilling activities, then this should be reflected in the sequence of operations. Please note that any reference to pressure testing or integrity testing should reference the appropriate sections for additional details. (i.e. Pressure Test BOP as per section 7.14)

|  |
| --- |
| *[Please type here]* |

## 7.17 Leak-Off/Formation Integrity Test

|  |  |  |
| --- | --- | --- |
| **Type (FIT/FLOT/XLOT)** | **Casing Section** | **Equivalent Mud Weight Value (kg/m3)[[19]](#footnote-19)** |
|  |  |  |
|  |  |  |
|  |  |  |

Provide a summary of the plans for conducting leak-off tests or formation integrity tests.

|  |
| --- |
| *[Please type here]* |

## Well Termination

**8.1 Completion Program**

If the well is to be completed, indicate the objective of the completion in terms of the following information:

1) Intended service.

|  |
| --- |
| *[Please type here]* |

2) Equipment to be used.

|  |
| --- |
| *[Please type here]* |

3) A schematic describing the well and its completion components.

|  |
| --- |
| *[Please type here]* |

4) Cased hole logging plans.

|  |
| --- |
| *[Please type here]* |

5) A high level operational sequence..

|  |
| --- |
| *[Please type here]* |

6) Pressure Testing Summary

Complete Table 10a and 10b to describe all the pressure tests and inflow tests to be conducted, including the relevant test details (pressure, duration, testing fluid).

*Table 10a: Pressure Tests*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Surface Pressure (kPa)** | | **High Test Duration**  **(mins)** | **Fluid/Density for Pressure Test**  **(kg/m3)** | **Identify the well barrier elements being pressure tested.** |
| **Low** | **High** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

*Table 10b: Inflow Testing Details*

|  |  |  |  |
| --- | --- | --- | --- |
| **Differential Pressure (kPa)** | | **High Test Duration**  **(mins)** | **Identify the well barrier elements being pressure tested.** |
| **Low** | **High** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Clearly identify any well barrier elements that are proposed to **NOT** be tested in the direction of flow to confirm its integrity for the maximum anticipated operating pressure. Provide rationale.

|  |
| --- |
| *Please type here]* |

7) For flow-back and/or injectivity operations of development wells drilled and completed from MODUs, the operator is required to comment on how they intend to address subsection 34(2) of the D&P Regulations and associated guidelines.

|  |
| --- |
| *[Please type here]* |

**8.2 Well Abandonment/Suspension**

If the well is to be abandoned or suspended, then a description of the abandonment or suspension program should be provided and the table completed regarding plug(s) that will be set.

|  |
| --- |
| *[Please type here]* |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Plug #** | **Description** | **Depth/Interval** | | **Pressure Test** | | **Tagging** | |
| **Proposed Pressure Test (kPa)** | **Well Fluid Density (kg/m3)** | **To be Tagged (Yes/No)** | **Tagging Weight**  **(MT)** |
| **mRT (MD)** | **mRT (TVD)** |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |

This description should also be supplemented with a well schematic that illustrates the planned location of the plug(s) and any other pertinent information that aids in depicting the proposed configuration of the abandoned or suspended well.

|  |
| --- |
| *[Please type here]* |

Confirmation should also be provided that the manner in which the well will be abandoned or suspended meets the requirements of sections 56-59 of the Regulations and associated guidelines*,* particularly as it relates to the need to isolate porous and permeable intervals, abnormally pressured zones, lost circulation zones, liner laps, any annuli that are open to a formation and the abandonment of casing stubs.

|  |
| --- |
| *[Please type here]* |

In the case of subsea wells that are to be permanently abandoned, information should also be included on any plans for the recovery of the wellhead, guidebase and any other subsea equipment, together with any plans to conduct a ROV seabed clearance survey.

|  |
| --- |
| *[Please type here]* |

If the application involves the suspension of a well, the estimated duration that the well is expected to be suspended should be indicated, together with the future proposed plans for the well; otherwise, indicate “Not Applicable”.

|  |
| --- |
| *[Please type here]* |

## Environmental Considerations

## 9.1 Environmental Assessment

Reference the applicable environmental assessment document (including the title and date of the document, and the Operator’s file number associated with the transmittal of the document to the C-NLOPB) pertaining to the drilling program.

|  |
| --- |
| *[Please type here]* |

## 9.2 Discharges Not Described in the Environmental Protection Plan

Provide a description of any discharges to the sea in association with the drilling of the well that are not described in the Environmental Protection Plan submitted with the application for authorization, or that have not been authorized by amendment to the Operations Authorization, together with an explanation of why the discharge is necessary. In such cases, information on the properties, volumes and environmental toxicity of the material to be discharged should be appended to this application.

|  |
| --- |
| *[Please type here]* |

## Contact Information

Identify the person from whom the C-NLOPB can seek clarification in the event of any questions with this application.

|  |  |
| --- | --- |
| Name: |  |
| Title: |  |
| Telephone Number: |  |
| E-mail Address: |  |

**------------------------------------------**

**oOo**

**End**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **TABLE 1**  **Well Evaluation Program – Conventional Coring and Logging** | | | | | | | | |
| **Hole Size**  **(mm)** | **Interval**  **(m)** | **Dev (Max)** | **Mud Type** | **Conventional Coring** | **LWD** | **Wireline** | **Cased Hole** | **Comments** |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

**Note:** Should a well evaluation program require alteration, the Operator is required to obtain approval of the proposed deviation by filing an "Amendment to a Well Data Acquisition Program" pursuant to section 50 of the Regulations.

Provide, in the space on the next page, any additional information or clarifying notes respecting compliance with the C-NLOPB’s well evaluation requirements. In particular, this should include:

1. the objectives of the coring program together with the targeted formation(s) to be cored, the length and diameter of core to be cut and the criteria to be used to determine core point;
2. a Glossary of any abbreviations used in the Table; and
3. the circumstances where any Optional or Contingent logs would be acquired.

|  |  |  |
| --- | --- | --- |
| Comments:   |  | | --- | | *[Please type here]* |   Glossary of Terms:   |  | | --- | | *[Please type here]* | |

1. ADW Application Template Revision 5 – June 2019 [↑](#footnote-ref-1)
2. The Operator is the entity that has been issued the Operating License and the Operations Authorization. [↑](#footnote-ref-2)
3. C-NLOPB Legal Well Name [↑](#footnote-ref-3)
4. There are federal and provincial versions of these regulations – the federal version is referenced here. [↑](#footnote-ref-4)
5. The application shall be signed by the Operator’s Representative responsible for the program. [↑](#footnote-ref-5)
6. Identify all installations that will conduct activities covered by this application. [↑](#footnote-ref-6)
7. Indicate the C-NLOPB Land Interest, for example: EL 1010. [↑](#footnote-ref-7)
8. Provide the Operation Authorization number under which the approval is being sought. [↑](#footnote-ref-8)
9. If applicable, indicate the Gas Storage License Number. [↑](#footnote-ref-9)
10. Provide the estimated water depth. In the case of excavated drill centers, the water depth should include the depth of the EDC. [↑](#footnote-ref-10)
11. Indicate, in metres, the estimated elevation of the rotary table above mean sea level. In the case of a floating drilling installation, the RT Elevation should be at drilling draft. [↑](#footnote-ref-11)
12. Provide the guidebase or well slot number, where applicable. [↑](#footnote-ref-12)
13. Format the date as: Month, Day, Year (e.g. June 1, 2009). [↑](#footnote-ref-13)
14. List each of the Interest Holders in the well (including the Operator) and their individual percentage interests. [↑](#footnote-ref-14)
15. Provide the total estimated cost of the well (CAD $ million) to the nearest 0.01 million. [↑](#footnote-ref-15)
16. Sampling frequency should follow the Board’s Data Acquisition and Reporting Guidelines or the Field Data Acquisition Program. [↑](#footnote-ref-16)
17. Include a summary of the design load cases that were evaluated, together with a description of the worst-case design load and the depth at which the lowest safety factor occurs. [↑](#footnote-ref-17)
18. Indicate the rating of the casing or the connector (whichever is lowest). In the case where non-API casing is proposed, information respecting the casing burst, collapse and tensile specifications should be provided separately to the C-NLOPB’s Well Operations Engineer. [↑](#footnote-ref-18)
19. If a FLOT or XLOT is planned indicate minimum required formation integrity. [↑](#footnote-ref-19)