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**APPLICATION FOR**

**AUTHORITY TO RE-ENTER A WELL (ARW)**

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| Operator[[1]](#footnote-1): |  |
| Well[[2]](#footnote-2): |  |

The Operator hereby applies for Authority to Re-enter a Well (ARW), pursuant to section 8 and 9 of the *Petroleum and Natural Gas Act (R.S.N.L. 1990, c. P-10)* and in compliance with section 24 of the *Petroleum Drilling Regulations (CNR 1150/96)*

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[[3]](#footnote-3): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 (Printed Name)

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

**Instructions:**

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| 1. An Authority to Re-enter a Well (ARW) is required for any operation that involves re-entering a well following completion of the scope of activities covered by the Authority to Drill a Well (ADW). An ARW is not required if the planned operation is exempted pursuant to subsection 24(1)(b) of the *the Petroleum Drilling Regulations,CNR 1150/96 (the Regulation)*
2. Some well operations may not require an ARW. **Operators should consult with the Department of Industry, Energy and Technology (DIET) on a case-by-case basis if uncertainty exists as to whether or not an ARW is required.**
3. 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 DIET.
4. Once the application is completed, it should be signed and dated in blue ink by the Operator’s representative responsible for the program. A hard copy of the application, together with a CD containing both the MS Word document and a pdf of the signed version of the application, as well as electronic copies of any files and attachments associated with the application, should be submitted to DIET.
5. Provided that the application is complete and the proposed program is consistent with the regulations and assorted guidelines, approval will normally be issued within 21 days.
6. When completing this application, Operators should note that all of the requirements related to the “Drilling Program Approval” 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.
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 ARW during the execution of the program should be brought to the attention of the DIET as soon as reasonably practicable. In all circumstances, the DIET is to be notified prior to the implementation of any proposed change.
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**1.0 Introduction**

Describe the purpose and objectives of the well operation (1-2 paragraphs).

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| *[Please type here]* |

# General Information

Complete the table (refer to the relevant note for an explanation of the information needed).

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| --- | --- |
| Well Name: |  |
| Installation (s)1:  |  |
| Permit/License/Lease2:  |  |
| Drill Program Approval Ref. No.3:  |  |
| Authority to Drill a Well (ADW) No 4 : |  |
| Well Type5:  |  |
| Anticipated Start Date6:  |  |
| Estimated Duration7:  |  |
| Estimated Cost8:  |  |

## Notes:

1. Identify the drill rig, slickline, wireline, coiled tubing truck or other major equipment.
2. Indicate the legal land Interest.
3. Provide the DIET reference number of the related approved Drilling Program
4. Provide the DIET reference number of the approved Authority to Drill a Well (ADW)
5. Indicate the well type: “oil producer”, or “gas producer”
6. Format the date as: Month, Day, Year (e.g. June 1, 2009).
7. Provide the estimated duration of the well operation in days.
8. Provide the total estimated cost of the operation (CAD $ million).

## Well Operations Policies

Confirm that the well operation will be conducted in accordance with the Operator’s well operations policy documents listed in the Drilling Program or the Development Plan Approval. Otherwise, identify any deviations from the Operator’s policies or procedures in respect of this well operation that affect regulatory compliance.

Confirmation should also be provided that a well barrier analysis has been undertaken to confirm that there will be at least two well barriers in place at all times during each step of the well operation. Any exceptions to having at least two well barriers should be described, along with details of the risk mitigation measures that the Operator proposes to implement.

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| *[Please type here]* |

## 4.0 Special Safety Considerations

Discuss any conditions unique to this well that may affect the safety of the well operation.

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| *[Please type here]* |

**5.0 Equipment**

Indicate the name of the drilling rig that will be performing the well intervention. Also, indicate if the well operation will be conducted by drill rig, slickline, wireline, coiled tubing or other equipment.

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| *[Please type here]* |

# 6.0 Well Schematic

Embed in this section of the application, or attach as an Appendix, a schematic illustrating the current status of the well including the downhole equipment and tubulars. Also, in a separate schematic, illustrate the proposed configuration of the well after the proposed well operation has been completed. The schematic should emphasize the equipment to be installed as part of the well operation and the changes to the well as a result of the well operation.

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| *[Please type here]* |

If not part of the well schematic, embed in this section of the application, or attach as an Appendix, a schematic illustrating the production tree and wellhead.

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| *[Please type here]* |

A summary of the existing perforations, together with any new proposed perforations are to be provided in the following table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Proposed and/or Existing****Perforations** | **Top****(mRT MD)** | **Bottom****(mRT MD)** | **Formation** | **Status****(Open/Closed)** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

# 7.0 Sequence of Operations

Provide, at a high level, the step-by-step sequence of operations for the proposed well operation, including, in the case where pressure control equipment[[4]](#footnote-4) is utilized, the pressure (in either kPa, or MPa) to which the equipment will be pressure tested upon installation. Also identify any pressure tests that are required, subsequent to the well operation, to confirm the integrity of well barriers affected by the well operation e.g., production tree, downhole safety valves). In cases where the well operation could change the deliverability, or productivity of the well, any plans to test the well to determine the effects of the well operation should be listed as a step in the sequence of operations.

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| *[Please type here]* |

**7.1 Flaring Operations**

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 spilling hydrocarbons 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 of hydrocarbons with particular emphasis on any lessons learned from previous flaring operations; and

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

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| *[Please type here]* |

**8.0 Anticipated Pressures**

Complete the table:

|  |  |
| --- | --- |
| **Parameter** | **Pressure (kPa)** |
| Maximum Shut-in Tubing Head Pressure: |  |
| Maximum Flowing Wellhead Pressure: |  |
| Maximum Bottom Hole Shut-in Pressure: |  |

**9.0 Fluids**

Indicate the workover fluid to be used during the well operation, as well as the completion/packer fluid in the tubing/production casing annulus.

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| *[Please type here]* |

**10.0 Reference Log**

Indicate the name of the log (including Trip #, Run # and Date) to be utilized for depth control and correlation purposes in respect of the well operation.

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| *[Please type here]* |

**11.0 Well Test Summary**

Using tables where appropriate, provide a summary of well tests performed to date, including date and time of the test, FTHP (kPa), downhole gauge pressure (kPa), oil rate (m3/d), gas rate (m3/d), water rate (m3/d), GOR (sm3/m3) and water cut (%). In cases where this information has been provided under separate cover, a reference to the document containing this information may be made in lieu of including the information in this application.

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| *[Please type here]* |

# 12.0 Reservoir Justification

Where the operation involves the addition of perforations or the abandonment of a completion interval, an assessment on the ultimate hydrocarbon recovery from the zones or pools involved should be provided in the form of a report, appended to this application that sets out:

* + the amount of oil, gas or condensate recovered from the well;
	+ an estimate of the amount of gas-in-place and/or oil-in-place remaining in the pool;
* in the case of abandonment; documentation demonstrating that production or injection can no longer be economically maintained including a discussion of the alternative recovery methods that have been evaluated and the alternative uses for the well that have been considered.

The report should contain sufficent information to justify the Operator’s proposed well operation and should specifically include, but not necessarily be limited to the following information as may be applicable to the proposed operation:

* production rates and the corresponding fluid ratios or injection rates for all wells impacted by the well operation (include graphs as necessary illustrating daily oil production, daily water production, daily gas production, gas/oil ratio, daily water cut, cumulative oil production, cumulative water production, daily water injection, cumulative water injection);
* bottom hole pressure and production characteristics of adjacent wells;
* a geological assessment of the areal region and the stratigraphic zones that are impacted by the abandonment, including an overview of the blocks or layers, structural maps and cross sections as well as STOOIP estimates;
* a summary of the relevant petrophysical data; and
* an assessment of the effect of the operation on ultimate recovery.

**13.0 Plugging Program**

In the case the well or part of the well is to be suspended or abandoned, a description of the plugging program should be provided, together with a well schematic illustrating the location of plugs. Confirmation should also be provided that the manner in which the well will be abandoned or suspended meets the requirements of Part VIII of the Regulation*,* 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. 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”.

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| *[Please type here]* |

Complete the table:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Plug #** | **Description** | **Depth/Interval****(mRT MD)** | **Proposed Pressure Test (kPa)** | **To be Tagged (Yes/No)** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

In the case of cement plugs, a description of the composition of the slurries should be provided below:

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| *[Please type here]* |

**14.0 Environmental Considerations**

**14.1 Environmental Assessment**

If applicable, provide the title and date of any applicable environmental assessment document pertaining to the program.

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| *[Please type here]* |

**14.2 Pollution Prevention Plan**

Where the well is located within 100 metres of the normal high water mark of a body of water or permanent stream, the operator shall submit evidence that he or she has obtained prior written approval of his or her plan to prevent pollution of the water from those regulatory bodies that have jurisdiction in respect of the drill site.

These plans shall
(a) indicate the elevation of the land and water surfaces adjoining the drill site;
(b) describe special problems at the drill site;
(c) include details of the construction and maintenance of dikes, reservoirs and other installations intended to be constructed; and
(d) provide particulars in respect of the method to be used to dispose of mud, oil, water or other fluids associated with the proposed drilling operations.

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| *[Please type here]* |

**15.0 Contact Information**

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

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

**End**

1. The Operator is the entity that has been issued the Licence or Permit. [↑](#footnote-ref-1)
2. The name of the well should be the same name assigned to the well when the ADW was issued. [↑](#footnote-ref-2)
3. The application shall be signed by the Operator’s Representative responsible for the program. [↑](#footnote-ref-3)
4. In the case of BOPE, the proposed pressure test of the equipment should be indicated. [↑](#footnote-ref-4)