

Frequently Asked Questions

Directive 056—Wells Technical

This document clarifies and supports some of the technical requirements related to *Directive 056: Energy Development Applications and Schedules* well applications. The questions below address common omissions or errors.

PREPARATORY WORK

Q1. We have preset surface casing in a well, but the main drilling rig has not been moved on hole to complete the drilling to the approved projected total depth. We intend to drill the well to total depth, but it is possible that a significant period of time may pass before we do and we are concerned about the well licence expiring. Do we need to inform the AER? If so, how, and what information is required?

A1. Yes. Report a drilling activity notification through the Digital Data Submission (DDS) system with the drilling activity type of “Drilling to Set Surface Casing Only.” Direct any questions regarding the entry of a Drilling Activity Notification to the FIS Administrator FIS.Administrator@aer.ca.

This notification indicates that the well licence has been acted on and will ensure that the well licence is not inadvertently cancelled due to expiry of the well licence.

Q2. We have preset surface casing in a well and do not intend to move a rig on to drill to the approved projected total depth. Are we required to report this information to the AER? If so, how, and what information is required?

A2. Yes. Report a drilling activity notification through the Digital Data Submission (DDS) system with the drilling activity type of “Drilling to Set Surface Casing.” Direct any questions regarding the entry of a Drilling Activity Notification to the FIS Administrator at FIS.Administrator@AER.ca.

In addition to the drilling activity notification, a licensee is required to report the summary of drilling operations in accordance with *Directive 059: Well Drilling and Completion Filing Requirements* using the Well Records System (WRS) upon completion of drilling to the final depth of the well. Direct any questions regarding the data entry of the summary details for the drilling operations in WRS to Well Data Services at WellDataServices@aer.ca.

CO₂ WELLS DRILLED TO EVALUATE FORMATIONS

Q3. How do I make an application for a well where the purpose is to conduct a geological or geophysical stratigraphic evaluation associated with CO₂ injection and storage in formations?

A3. Prior to making the application, the applicant must satisfy the consultation and notification requirements set out in table 7.1 of *Directive 056* commensurate with the category and type of well-being applied for. When filing the application through the Digital Data Submission (DDS) system, the applicant should include CO₂ in the applicant's file number. On schedule 4, the applicant should select a well type of "Test," a substance name of "None," and the Lahee classification of "Test Hole," in accordance with table 7.8 of *Directive 056* and section 2.030 of the *Oil and Gas Conservation Rules (OGCR)*. For the confidential status, Confidential (C) should be chosen. All other fields should be filled out in accordance with *Directive 056* requirements.

GEO EXCHANGE WELLS

Q4. How do I make an application for a geo-exchange well that will be drilled deeper than 150 m?

A4. Prior to making the application, the applicant first must satisfy the consultation and notification requirements for a B141 well set out in table 7.1 of *Directive 056*. When filing the application through the DDS system, the applicant should select a well type of "Evaluation" and a substance name of "None" on schedule 4, in accordance with table 7.8 of *Directive 056* and section 2.020 of the *OGCR*. A Lahee classification of "Other" with a "Non-Confidential" status should be selected. All other fields should be filled out in accordance with *Directive 056* requirements.

The AER is currently evaluating the regulatory process as it pertains to geo-exchange wells; however, until this review is complete, the AER expects the applicant to submit the following supplemental information in addition to the application:

A geological evaluation of the area to ensure that (a) shallow gas will not be encountered during drilling of the well, and (b) groundwater will be protected. The evaluation should also include any surface casing vent flow information and/or lost circulation events for wells in the area.

- A drilling and completions plan for the well, including casing and cementing.
- A discussion on whether or not well logging will be completed and reasons why an exemption may be required.
- An operations plan that includes the configuration of the geo-exchange equipment and wellhead and the type of liquid that will be circulated.
- A monitoring and maintenance plan for the well and equipment.
- A discussion of any relaxation to setback requirements that may be required.

Note: In accordance with *Directive 056*, section 7.5, the AER grants licence exemptions to wells drilled to a depth of less than 150 m that are not intended to encounter or produce hydrocarbons. If an applicant is planning to drill a geo-exchange well in an area where shallow hydrocarbons are known to occur, an application should be made that contains the supplemental information listed above.

DRILL CUTTING SAMPLE CHANGES

Q5. May I submit changes to the drill cutting sample depth(s) or formation name(s) for a well to be drilled after receiving the well licence?

A5. Yes, but the AER will only accept changes before the spudding of the well. E-mail any changes on company letterhead to the Application Assessment Group at ApplicationAssessment@aer.ca. Include the following information:

- application number
- licence number
- bottomhole location
- original to and from formation name/casing
- original depth (m)
- new to and from formation name/casing
- new depth (m)
- Lahee classification
- reason for the change

Allow **15 business days** for the AER to review the request and provide a response.

LAHEE CLASSIFICATIONS AND GEOLOGIC CONFIDENTIALITY

Q6. Is there any verification that the correct Lahee and geologic confidentiality status was selected while applying for an AER well licence using schedule 4 in *Directive 056*?

A6. No, AER staff do not review the Lahee classification before a well licence is issued. However, the AER Reserves and Pore-Space Management Group may review a well's Lahee classification at any time.

Q7. Does the well licence document always reflect the Lahee and geologic confidentiality status selected in schedule 4 at the time of application?

A7. Yes, for all “new” well licences. Some other application types allow the applicant to select Lahee and geologic confidentiality, but only applications resulting in the issuance of a new unique well identifier (UWI) will receive the applicant’s selection in schedule 4.

Applications which result in an updated or changed UWI (but not a new event sequence) will not accept an applicant’s Lahee and geologic confidentiality entry from schedule 4. In these cases, the Lahee and geologic confidentiality is left consistent with the pre-existing licence record at the AER.

In certain circumstances, an application may be closed when a selection that contradicts an existing record of the Lahee and geologic confidentiality is made.

It is strongly recommended that the licensee review each well licence to ensure that the Lahee classification is accurate.

Q8. Once my well licence is issued, can the Lahee and geologic confidentiality status be changed?

A8. A licensee who detects an incorrect selection can send a letter to the AER Reserves and Pore-Space Management Group requesting a revision. The group will reply with a letter confirming the revision. As with new licences, AER staff will not review revision requests to ensure that status selections were made correctly.

Q9. What if I have questions about the Lahee and geologic confidentiality status on my well licence?

A9. Contact the AER Reserves and Pore-Space Management Group via e-mail at GeoConfTeam@AER.ca. Include the relevant UWI and well licence number.

Q10. How can I know, at any given time, if my well data is confidential?

A10. The AER website publishes a daily list of all the confidential & partial confidential wells in the province.

ROAD ALLOWANCE

Q11. How can I determine the surface location for a well in a road allowance?

A11. The surface location of the well is determined by the closest legal subdivision (LSD) directly to the north and/or east of the well’s location in the road allowance. For example, for a well that lies in the road allowance on the south side of section 13, the closest LSD in section 13 would be used

for the surface location. If the well were located instead in the road allowance between sections 13 and 14, the closest LSD in section 13 would still be used for the surface location.

Q12. How can I calculate the local coordinates for a well in a road allowance?

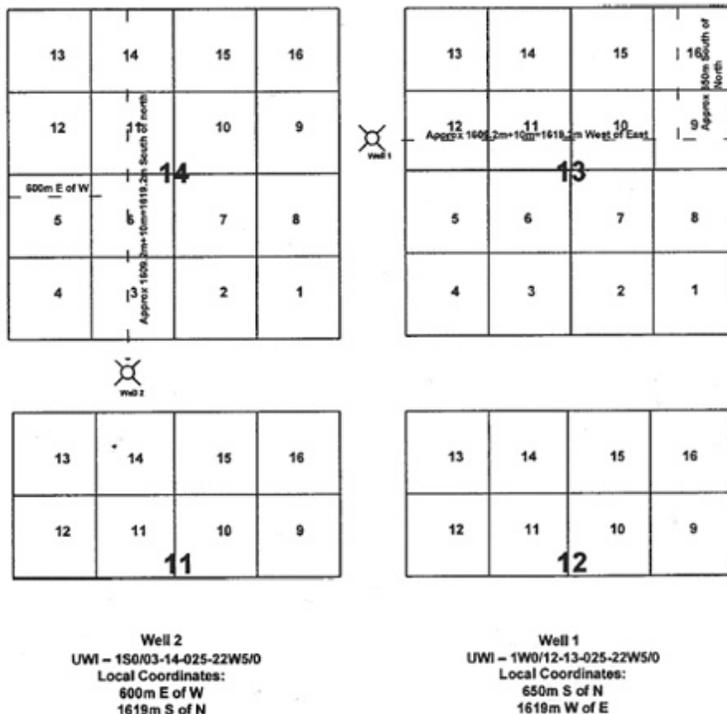
A12. The local coordinates for a well within a road allowance are measured from the section line on the opposite side of the section from the well and are recorded as being either south or west of the edge of the section. This number should be the width of the section plus the distance the well is within the road allowance.

Example:

If your well is located between sections 13 and 14, your unique well identifier (UWI) should be calculated in the closest LSD within section 13.

If your well is located between sections 14 and 11, your UWI should be calculated in the closest LSD within section 14.

The AER’s Electronic Application Submission system is designed to accept surface coordinates for wells located in road allowances for all standard-sized sections (between 1609.2 to 1629.3 metres). If the well is in an area where sections are smaller than the standard size, you should e-mail EAS.Administrator@aer.ca or phone 403-297-2228 for help determining acceptable coordinates.



A well drilled in a road allowance is referenced either south or west of the legal subdivision indicated in the unique well identifier.

BOTTOMHOLE LOCATION CHANGES

Q13. Do I have to submit a revised survey plan if I am submitting a well licence amendment application to change the bottomhole location prior to spud?

A13. No. As there are no surface details changing, a revised survey is not required if you are only changing the bottomhole location prior to spud.