

Frequently Asked Questions

Well Application Audit Submissions (Technical)

March 2016

This document clarifies and supports the submission of audit documentation for the technical requirements of *Directive 056: Energy Development Applications and Schedules* well applications. The questions below address common omissions or errors within the audit submission.

This document supplements the audit requirements as outlined in *Directive 056*, section 7.11.

Q1. Where in *Directive 056* do I find a listing of the documentation required for a technical well audit?

A1. *Directive 056*, section 7.12, outlines the required audit documentation to be submitted for a technical audit of a well application. The table below outlines the appropriate sections in *Directive 056*.

Schedule 4	Well requirements
Step 5: Well purpose	7.12.5
Step 6: Re-entry/resumption/ deepening of a well	7.12.6
Step 7: Well detail – table Information	7.12.7.1
Step 7: Well detail – table Information (new coalbed methane [CBM] wells only)	7.12.7.1 & appendix 12
Step 7: Well detail – surface casing	7.12.7.2
Step 9: Mineral rights & rights to the complete drilling spacing unit	7.12.9.1 & 7.12.9.2
Step 10: Surface rights	7.12.10
Step 11: Question 1: Water body setbacks	7.12.11.1
Step 11: Question 1a: Other setbacks	7.12.11.2
Step 11: Question 2: Environmental requirements	7.12.11.3
Step 11: Question 2: Environmental requirements (new CBM wells only)	7.12.11.3 & appendix 12
Step 11: Question 3: <i>Historical Resources Act</i> clearance	7.12.11.4
Schedule 4.3	Well requirements
Step 1: H ₂ S release rate well prognosis	7.13.1
Step 2: Cumulative H ₂ S release rate & question 1: intermediate casing	7.13.1 & 7.13.2.1
Step 2: Question 2: Maximum H ₂ S concentration	7.13.2.2

Q2. What documentation needs to be submitted in response to a technical well audit request?

A2. When compiling documentation for submission in response to a technical well audit request, the AER recommends the following for the steps noted above.

Schedule 4

Step 5 – Well Purpose (Category/Type) – Category B Only

Audit Documentation Required

- A representative gas analysis for each prospective horizon in the proposed well.

Provide	Do not provide
A representative gas analysis for each perspective formation.	<ul style="list-style-type: none">• The summary page from third-party tabulated data.• The full report should be provided if a gas analysis is not provided.

Step 7: Well Detail – Table Information (Survey)

Audit Documentation Required

- The licensee must submit a survey plan.
- For CBM wells completed above the base of groundwater protection, the survey plan or an additional map must meet the requirements of *Directive 056*, appendix 12.

Provide	Do not provide
No documentation is required, as documents have already been submitted with the application.	Multiple copies of the survey plan throughout the audit package.

Step 9: Mineral Rights & Rights for the Complete Drilling Spacing Unit

Audit Documentation Required

Mineral Rights

- The mineral rights lease number for Crown minerals.
- Documentation that authorization has been obtained from the mineral rights lessee or owner for water injection or water source wells.
- Documentation that authorization has been obtained for leased Crown minerals.
- Documentation that authorization has been obtained for Freehold minerals.

Rights for the Complete Drill Spacing Unit

- Crown mineral rights lease numbers for leases covering the entire drill spacing unit (DSU).
- Documentation that authorization for freehold minerals has been acquired for the entire DSU.

Provide	Do not provide
<ul style="list-style-type: none"> • The P&NG lease number must be provided. • If the rights are not in the licensee’s name, an agreement letter must be submitted outlining the authorization for the mineral rights. The authorization letter must be signed and dated prior to the registration of the application. 	<ul style="list-style-type: none"> • A copy of an ETS search or other searches pulled out of SPIN. • Reports generated from internal systems (i.e., mineral summary reports). • A copy of an MSL as evidence of mineral ownership.

Step 11 – Question 1: Water Body Setback Requirements

Audit Documentation Required

- If well centre is located within 100 m of a water body, documentation from the licensee outlining the measures that were or will be taken to ensure that the water body is protected and that all AER requirements have been or will be met.
- If a water body will be disturbed by the well activity, the applicant must submit to the AER the approval received under the *Water Act*.

Step 11 – Question 1 (a): Other Setback Requirements

Audit Documentation Required

- If the proposed well is located within 100 metres (m) from a surface improvement, the licensee must submit documentation confirming that consent from the surface improvement owner was received before the submission of the well licence application.
- If the proposed well is located within 3 kilometres of a working mine or within 400 m of an abandoned mine, the licensee must submit documentation confirming that the requirements of the *Oil and Gas Conservation Rules*, sections 6.140 to 6.190, will be met.

Provide	Do not provide
<p>The signed letters of authorization from all surface improvement holders within 100 m of the well centre. The authorization letters must be signed and dated before the registration of the application.</p>	<p>Only a line list stating that consent was granted, as all the signed consents must be submitted with the audit.</p>

Step 11 – Question 2: Environmental Requirements

Audit Documentation Required

Document the steps that will be taken to ensure the protection of the environment and that all AER requirements are met.

For CBM wells completed above the base of groundwater protection (BGWP), the licensee must submit the additional documents indicated in *Directive 056*, appendix 12.

Provide	Do not provide
<ul style="list-style-type: none">• A concise statement that identifies at least one of the following that has been, or will be, used on the lease site (section 7.11.13):<ul style="list-style-type: none">– berms constructed using impermeable materials– synthetic liner– vacuum truck– absorption material– enclosed systems with tankage– textile mat• If applicable, the licensee should submit all documentation outlined in <i>IL 93-09: Oil and Gas Developments Eastern Slopes (Southern Portion)</i>.	<ul style="list-style-type: none">• An environmental impact assessment or any other assessment created by a third party• The environmental field report

Step 11 – Question 2: Environmental Requirements (New CBM Wells Only)

Audit Documentation Required

For CBM wells completed above the BGWP, the licensee must submit the following additional documents as indicated in *Directive 056*, appendix 12:

- *Directive 035* cover letter.
- Standard survey plan.
- *Directive 035* CBM water well information.
- Map or survey plan that shows the following:
 - Any active water well or water observation well within a 600 m radius of the proposed well, or if none is identified within a 600 m radius, the nearest water well or observation well within a 600 to 800 m radius.
 - Latitude and longitude coordinates (NAD 83) of active water wells and observation wells.
- Documentation showing the following:
 - Offers to test water and observation wells made prior to application, indicating landowner/occupant and the date of offers.

- The corresponding acceptances and refusals.
- In lieu of testing, any water well test result provided by the landowner that complies with the AEP standard.
- Written confirmation from landowners that testing is not required.

Step 11 – Question 3: Historical Resources Act Clearance

Audit Documentation Required

If applicable, the licensee must submit documentation showing it received a clearance from the Government of Alberta before submitting the well licence application.

Schedule 4.3

Step 1: H₂S Release Rate Well Prognosis by Potential H₂S Horizon

Audit Documentation Required

- A map showing the size and location of the search area used to obtain a minimum of five valid (not discounted) maximum H₂S concentrations and five maximum AOF gas rates.
- An H₂S release rate documentation package that includes
 - a geological well prognosis with comprehensive geological discussion for all formations/zones,
 - geological mapping for all formations it has identified or will identify on “Schedule 4: Well Purpose” as its primary and secondary zones that may contain H₂S gas,
 - an engineering discussion for each potentially productive zone that may contain H₂S gas, and
 - tabulated data that provides the results of H₂S concentration and AOF rate reviews.

OR

- If a presubmission H₂S release rate assessment was submitted, the licensee must submit a copy of the letter issued by the AER that shows that the presubmission application was reviewed and found to be acceptable.

Step 2: Cumulative H₂S Release Rate & Question 1: Intermediate Casing

Audit Documentation Required

- The depth to which the intermediate casing will be set.
- If an intermediate casing waiver has been granted, the licensee must submit a copy of the approval issued by the AER that shows that the precicensing application was reviewed and found to be acceptable before the well application.

Step 2 – Question 2: Maximum H₂S Concentration

Audit Documentation Required

No documentation required (see *Directive 056*, section 7.13.1).

Provide	Do not provide
<ul style="list-style-type: none">• The engineering discussion must meet the requirements as outlined in <i>Directive 056</i>, section 7.11.15.3. (See appendix 7 for an example.)• The geological discussion must meet the requirements as outlined in <i>Directive 056</i>, section 7.11.15.1. (See Appendix 7 for an example.)• The geological prognosis is to indicate each formation the well is to encounter.• The geological mapping should follow the instruction in section 7.11.15.2.	<ul style="list-style-type: none">• If tabulated data is provided from a third party, the full report should be provided. A summary page is not sufficient.

Q3. Who do I contact should I have further questions concerning my audit submission?

A3. Questions pertaining to *Directive 056* technical audits may be sent to AER's Customer Contact Centre at 403-297-8311 (toll free: 1-855-297-8311), or by e-mail at [inquiries@aer.ca](mailto:inquiries@ aer.ca).