



# The simple, thorough way to satisfy the **requirements** of AER Directive 008



## **Surface**Casing Report

### **Automate the work**

XI's SurfaceCasing Report utilizes an interactive console to guide you through the AER directives to ensure that nothing is missed. We automate the required steps to establish a surface casing depth – an integral part of establishing a comprehensive drilling program and a requirement to satisfy the Alberta Energy Regulator's (AER) Directive 008. More than 50 percent of companies actively drilling in the WCSB rely on XI data and tools to simplify their regulatory compliance and operate sustainably.

### **XI's SurfaceCasing Report also includes:**

- Survey of pressures
- Flow rates
- Leak off tests
- Required cement tops
- Field kick rates
- Historical casing depths

XI's RegulatorySuite features reliable research tools to help Alberta, British Columbia, and Saskatchewan operators mitigate drilling risks and adhere to the guidelines and standards outlined by Alberta Energy Regulator (AER) Directives for H2S release rate potential and surface casing depths.

## Don't miss a thing

XI's SurfaceCasing Report uses a compilation of data sources to execute a search for all pressures/gradients in the area, and then determines a thorough analysis of anticipated pressures at specific depths.

- **Eliminate redundancy:** Do the work once. We'll remember your changes and comments and apply them instantly to your future reports.
- **Gain peace of mind:** We help to ensure compliance with a streamlined and structured workflow and allow for easy access to Directive 008. By maintaining a clear record of your work, we also help you to be more prepared in case of an audit.
- **Have better accessibility:** The web-based platform is more stable and allows you 24/7 access via any device with an Internet connection.
- **Instant improvements:** Any feature updates that we make are applied instantly to your previously ordered reports.
- **Easy collaboration:** Our products allow for company-wide access. Transfer reports to colleagues with no more confusion over multiple versions, we even track who makes which changes for clear accountability.
- **STICK diagram basis:** The SurfaceCasing Report gives you a starting point to complete your AER requirements for Directive 036: Make pressure information available to on-site personnel (11.1.4).
- **Regulatory cohesion:** Pull information from your XI H2SReports into your SurfaceCasing Report and have everything in one place.
- **Exportability:** With one click you can export a comprehensive PDF report.

Projected TVD (m): 5000  
KB Elevation (m): 58

Well Location:  
Formation at TD: Montney 4820  
KB Elevation (m): 58.00  
Normal Depth (m): 606.82  
Requirements: Surface casing is less than 650m. See section 2.2  
Special Case: None  
Exemption: None

Water Well Search  
Normal Required  
Type 1 Reduction  
Type 2 Reduction  
Type 3 Reduction  
Type 4 Reduction

Part 1: Water Well Search

Part 2: Surface Casing Required

1. Representative pressure measurement in area: 21,127.00 kPa
2. Depth of pressure measurement: 1,484.03 m
3. Reference well: 00/A-075-G/094H04/02  
Select a pressure test...
4. Higher pressures GRADIENTS were found but were discounted: No
5. Maximum gradient: [1] ÷ [2]: 14.24 kPa/m  
Maximum Formation Leak-Off Test Result (if exists) (kPa/m): 22  
The formation Leak-off test result must be used in each equation if it is less than 22 kPa/m. See Appendix D for formation leak-off test information. View Leak-off Data...
6. Surface casing (SC) depth required: 606.82 mTVD

Option 1: Calculate surface casing depth.  
SC Depth =  $\frac{\text{Maximum gradient} \times \text{TVD} \times (0.5 - 0.0000625 \text{ TVD})}{22 \text{ kPa/m}}$

Option 2: Calculate SC depth for each zone.  
SC Depth =  $\frac{\text{Maximum gradient (at zone)} \times \text{TVD (at zone)} \times (0.5 - 0.0000625 \text{ TVD [at zone]})}{22 \text{ kPa/m}}$

*XI's Surface Casing Report pulls in a compilation of data from multiple sources and uses an interactive console to guide you through necessary steps to complete your Directive 008 requirements. See a summary of selected pressure and surface casing depth required, as well as a display of all available exemptions.*

## A tool made for professionals working in:

- Drilling
- Regulation
- HSE

Learn more about the **SurfaceCasing Report**  
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