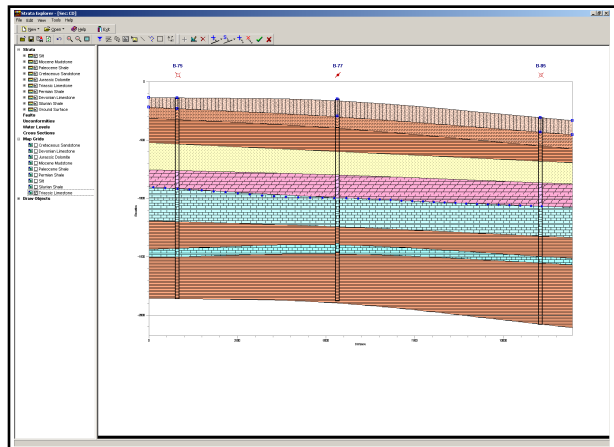# GAEASYNERGY

Quick Facts

This extension module can be used to create, detailed cross-sections for the mining, oil, geotechnical, and environmental industries.

After the cross-section has been created, it can be displayed in 3D as fence diagrams and the strata boundaries can be used in contour maps.

Features

• Sidebar for quick and easy editing
• Grid nodes from contour maps are displayed on the cross-section and can be used to automatically adjust the strata boundaries
• Strata boundaries can be used to create contour maps
• Improved creation and editing of faults
• Water levels can be automatically added from borings and wells
• Greatly improved editing of strata and alteration zone (mineralization, contamination, hydrocarbons) boundaries
• The automatic creation of cross-section strata has been improved with tighter links to the boring/well module
• Cross-sections can be included in page layouts for a project and shown either individually or as part of a montage
• EDMS sample and concentration data that is associated with a boring or well can be displayed in a cross-section.

WinFence Cross-sections

The WinFence cross-section module of GaeaSynergy can be used to quickly create detailed full-color cross-sections. A wide variety of strata can be used to create cross-sections. Types of strata that can be used include layers, faults, lenses, intrusions, mineralization, contamination, and hydrocarbons.

Very detailed and complicated stratigraphy can be represented and easily drawn. Layers can contain multiple segments to represent uncomformities and highly faulted zones.
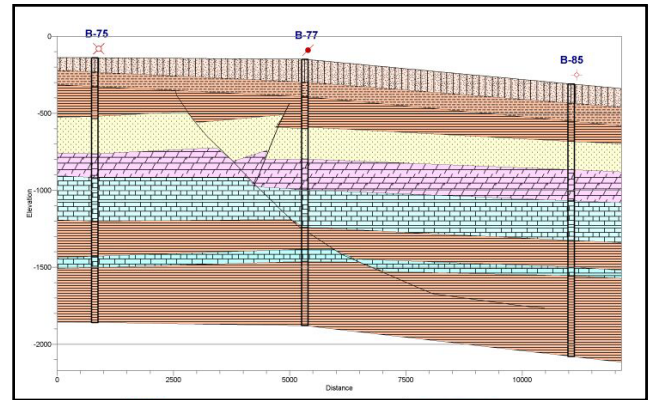
This module shares the same database as the WinLoG boring log module and can be used to access and plot the boring and well data. Several types of boring and well data can be plotted on the cross-sections; including lithologic symbols, sample symbols, core logs, well diagrams, graphs, and geophysical logs.

There is the option to have the program automatically generate the cross-section using artificial intelligence (AI) built-into the program. When determining how to connect the strata between boreholes, wells, and intersecting cross-sections the program looks at the similarities in the lithologies, thicknesses, and occurrence of the strata. This methodology works well with most geologies; except, where the geology is very complicated or there are faults.

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Features

The cross-section extension module is the latest version of our WinFence program and has all the old features and many new ones. Below is a partial list of these features.

- Sidebar for quick and easy editing
- Grid nodes from contour maps are displayed on the cross-section and can be used to automatically adjust the strata boundaries
- Strata boundaries can be used to create contour maps
- Unconformities can be added to a cross-section to control strata boundaries
- Improved creation and editing of faults
- Water levels can be automatically added from borings and wells
- Greatly improved editing of strata and alteration zone (mineralization, contamination, hydrocarbons) boundaries
- The automatic creation of cross-section strata has been improved with tighter links to the boring and well log module
- Cross-sections can be included in page layouts for a project and shown either individually or as part of a montage
- Cross-section path line can be straight or bent
- Intersecting cross-sections can be displayed on a cross-section
- Itersecting cross-sections can be used when automatically generating a new cross-sections
- Deviated boreholes can be displayed on a cross-section
- Cross-sections can use data entered in the boring and well log module to show lithologies, graphs, geophysical logs, samples, and well details at borehole locations
- Strata from the boring and well log extension module are automatically added to the cross-section

- Multiple water levels can be drawn on the cross-section
- First water level can be drawn automatically using the water levels stored in the boring and well log extension module
- Cross-sections can contain an unlimited number of layers, lenses, intrusions, faults, and alteration zones
- Strata boundaries can be connected by straight lines or a curve can be fitted to the boundary
- Boundaries can be snapped to other layers, faults or intrusions
- Layers can contain multiple segments and may be discontinuous
- Points defining strata boundaries can be graphically edited and deleted
- Horizontal and vertical scales of the cross-section can be specified or automatically fitted by the program
- Either custom or supplied lithologic symbols can be used to represent different strata, more than 300 are supplied with the program
- The foreground and background colors of the strata can be specified
- The size of the strata symbol can be adjusted
- Floating paragraph text boxes can be added anywhere to a cross-section
- Lines, poly-lines, arrows, and rectangles can be added anywhere to a cross-section
- The cross-section legend can contain lithologic symbols with standard or custom lithology descriptions