Cross Sections

TERRASCIENCES provides one of the most advanced, yet easy to use, packages for the display and analysis of well data available today. The correlation and cross section generation capabilities within TerraStation are second to none. A wide range of display types allows the user to display, edit, and store picks, enabling a better understanding of the sub-surface geology.

Deviated and Horizontal Wells
The Correlation module can easily handle the display of deviated wells. The adding of tops and other geological features is no more difficult with deviated wells than it is with straight wells. This allows immediate visual feedback whilst picking tops and other features such as fluid contacts within a deviated environment.

Adding Tops and Other Geological Features
Tops can be picked interactively. Anticlines, synclines, pinch outs, and faults can be added to the section and saved as part of the data model.

Cross Section Drafting
Standard cross section displays containing logs, patterns, and shading are quickly created and viewed on the screen. Changes to these displays can be made easily. Tracks in log templates can be modified to show any well feature or geological parameter. Some of the possible features that can be included in templates are: lithology types, trace fossil symbols, core descriptions and core photographs, perforations, casing, cored intervals, DST intervals, borehole images, synthetic seismograms, sonic waveform displays, dipmeter information, and much more. Curves can be easily shaded. Different log templates can be used for different wells.

Correlation User Flexibility
Individual interpreters can ‘undo’ picked features at any time and save their work to interpreter specific collections. Any type of well data can be used in the correlation process. These include standard logs as well as computed ones. Log data can be overlain, stretched and squeezed to compare sequences on different wells.

Mapping/Correlation Link
The Mapping and Correlation modules in the TerraStation have an underlying data link. This means that as edits to picks are performed in the Correlation module, the effect of the changes can be seen immediately on contour maps by simply recomputing grids and displaying contour maps.

Support and Training
TERRASCIENCES provides immediate telephone and email support by trained earth science professionals. A regularly updated web site, electronic newsletter, and training courses are also available. All product upgrades are included in the maintenance and support fee.
Product Specifications

- Structural and stratigraphic display options.
- Up to 10,000 wells per project, up to 300 wells per section.
- Any depth reference datum can be used for displaying the data (e.g. MD, TVD, TST, TVT, travel time).
- Display logs and any other well data along deviated borehole paths.
- Up to three interpretative overlays per section.
- Different log templates can be used on different wells.
- Interactive selection of wells and data to be displayed.
- Allows raster and other graphic images to be incorporated as part of the display.
- Interactive pick correlation on both straight hole and deviated displays.
- User definable cross-section title block feature.
- Tops in adjacent wells don’t have to be connected by straight lines, i.e., structural horizons generated in mapping module can be shown in cross section.
- Interactive well gapping feature --- show where the sequence is missing due to faulting or unconformity.
- Easily add faults and pinch outs.
- Easily make 3D fence diagrams.