



TGT Oil And Gas Services

Well Logging Interpretation Software

LogViz

Brochure

2009

FEATURES

LogViz is designed to visualize and analyze well logging data, to format and print logging diagrams and to process these data using plug-in modules.

Source log data are loaded from LAS text files or Log Viewer projects.

Display and print settings may be defined by the user or generated automatically.

Additional data (well sketch, lithological column, etc.) are then entered or loaded to form a LogViz project.

The project is stored in native LVZ format and can be printed or saved as an image file.

The main LogViz features are:

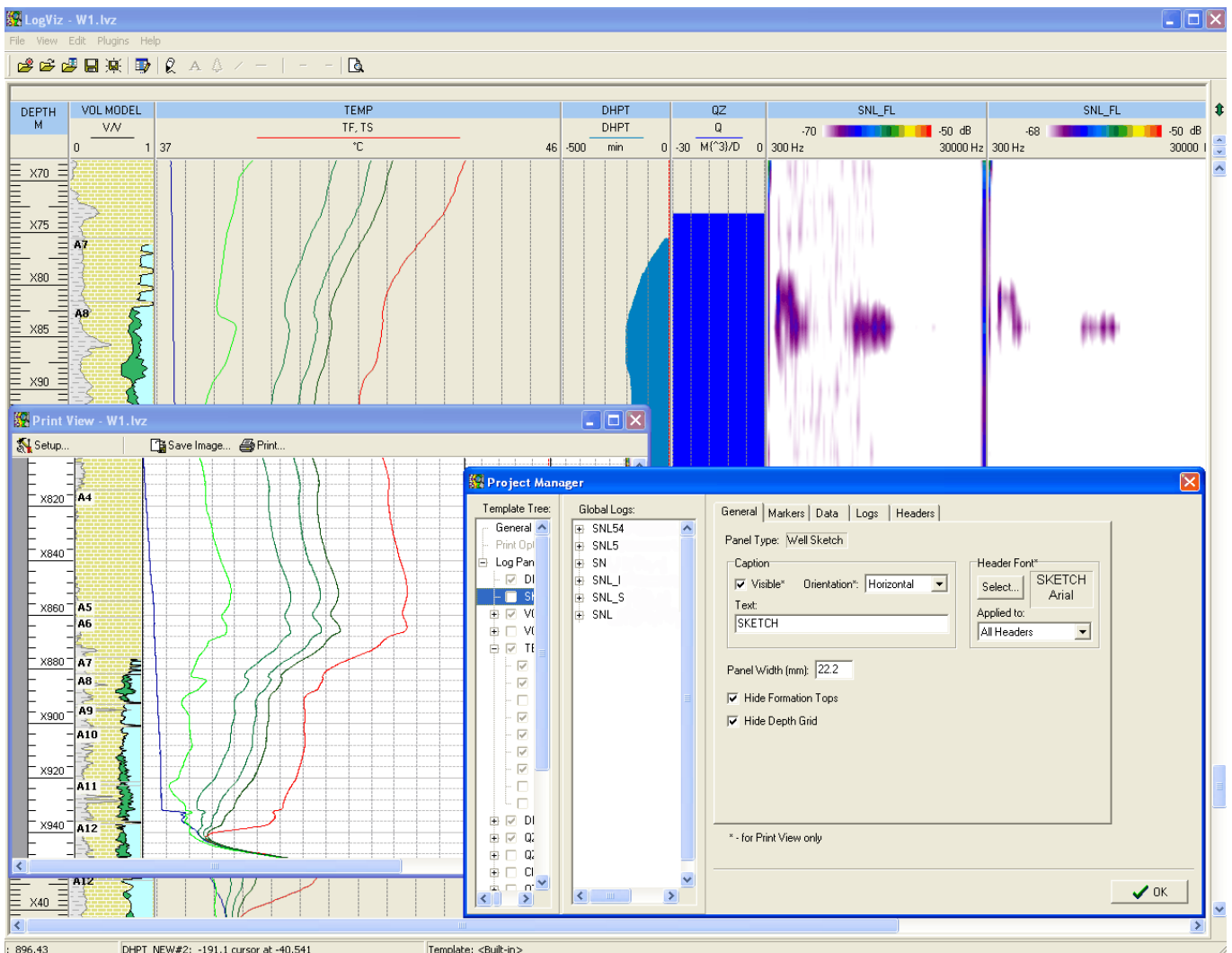
- visualization of LAS, LVW and LVZ (native) files
- support of templates for displaying and printing well logs
- display of logging data as the following column panels:
 - Depth panel
 - Well Sketch panel
 - Lithological column (Formations panel)
 - 2D logs (Logs panels)
 - Image logs (Color Image panels)
- integration of data and templates into project files
- printing standard multi-page reports containing one or more projects
- support of data processing plug-in modules connected via COM interface

APPLICATION'S USER INTERFACE

The application's user interface is basically comprised of three windows:

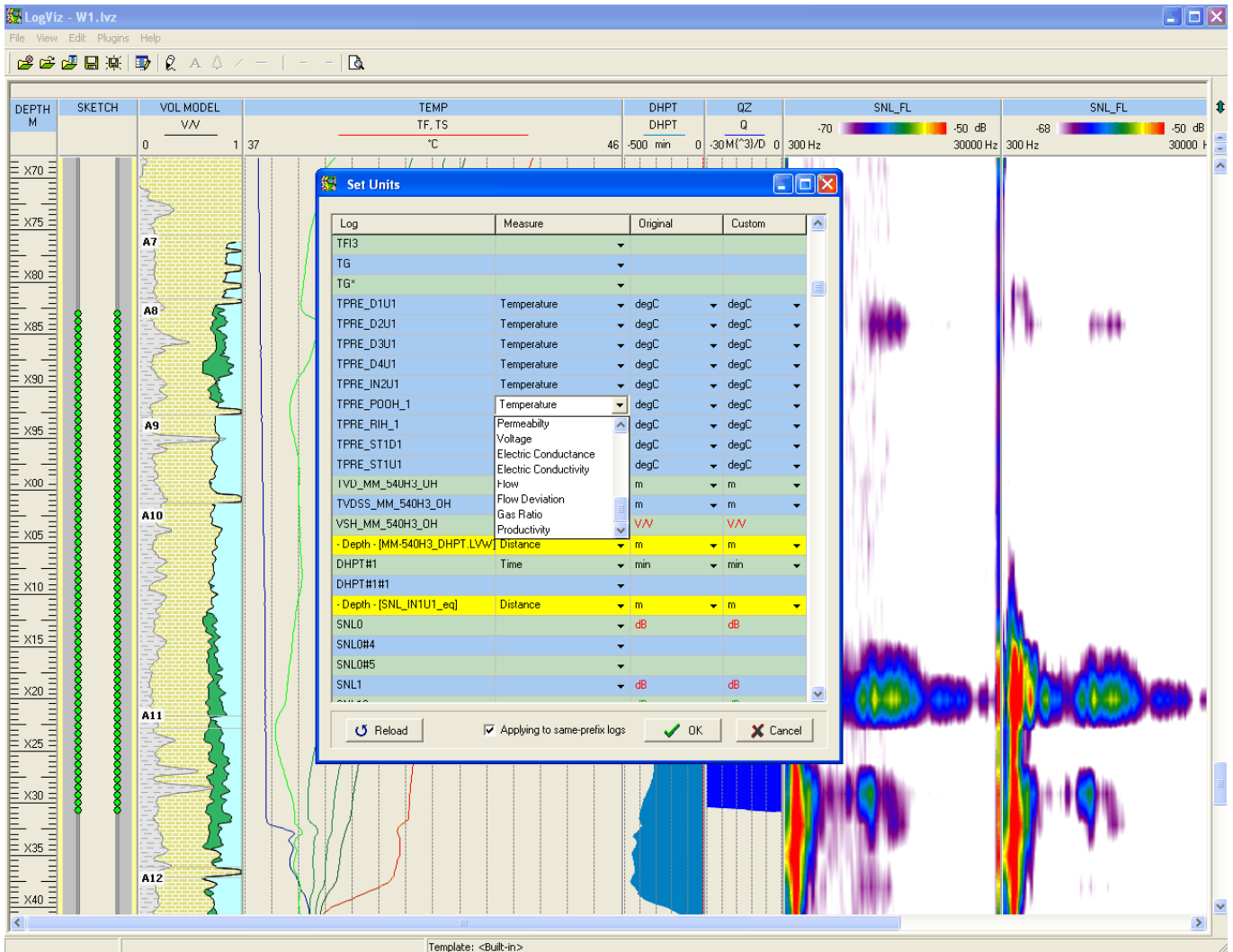
- the main window designed to visualize and analyze logging data
- the Project Manager window designed to govern a project and to edit its built-in template and additional data
- the Print View window designed to format and print logging diagrams

The three windows work in accordance, so that changes made to one of them are immediately reflected in the others.



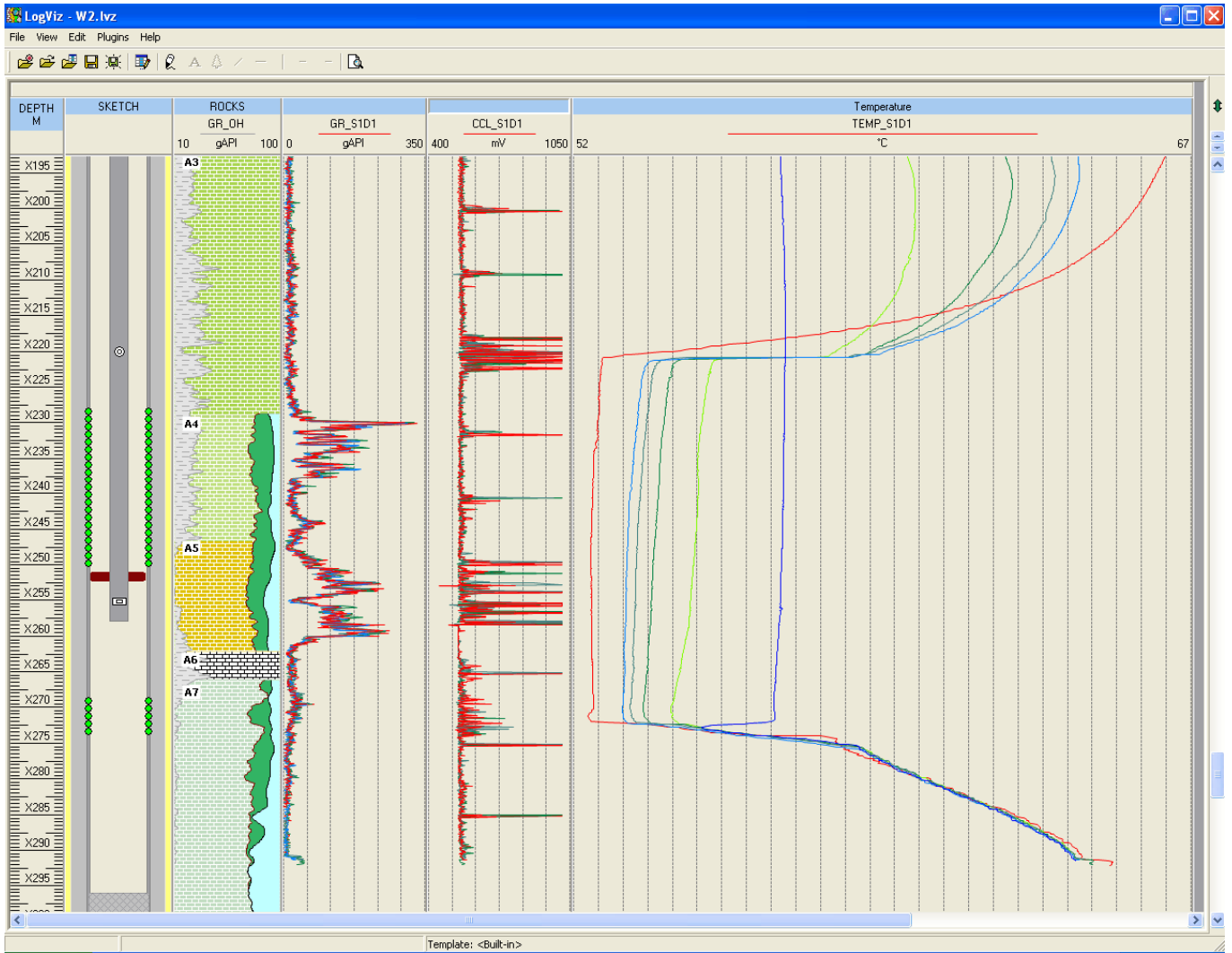
MEASUREMENT UNITS

When loading the source log data, LogViz recognizes their measurement unit symbols with the help of the UniSum library, so that the user can accept or change them in the Set Units dialog at once or do it later.



MAIN WINDOW

The loaded data are displayed in the application's main window in a series of column panels, each of it displaying logs or additional data.

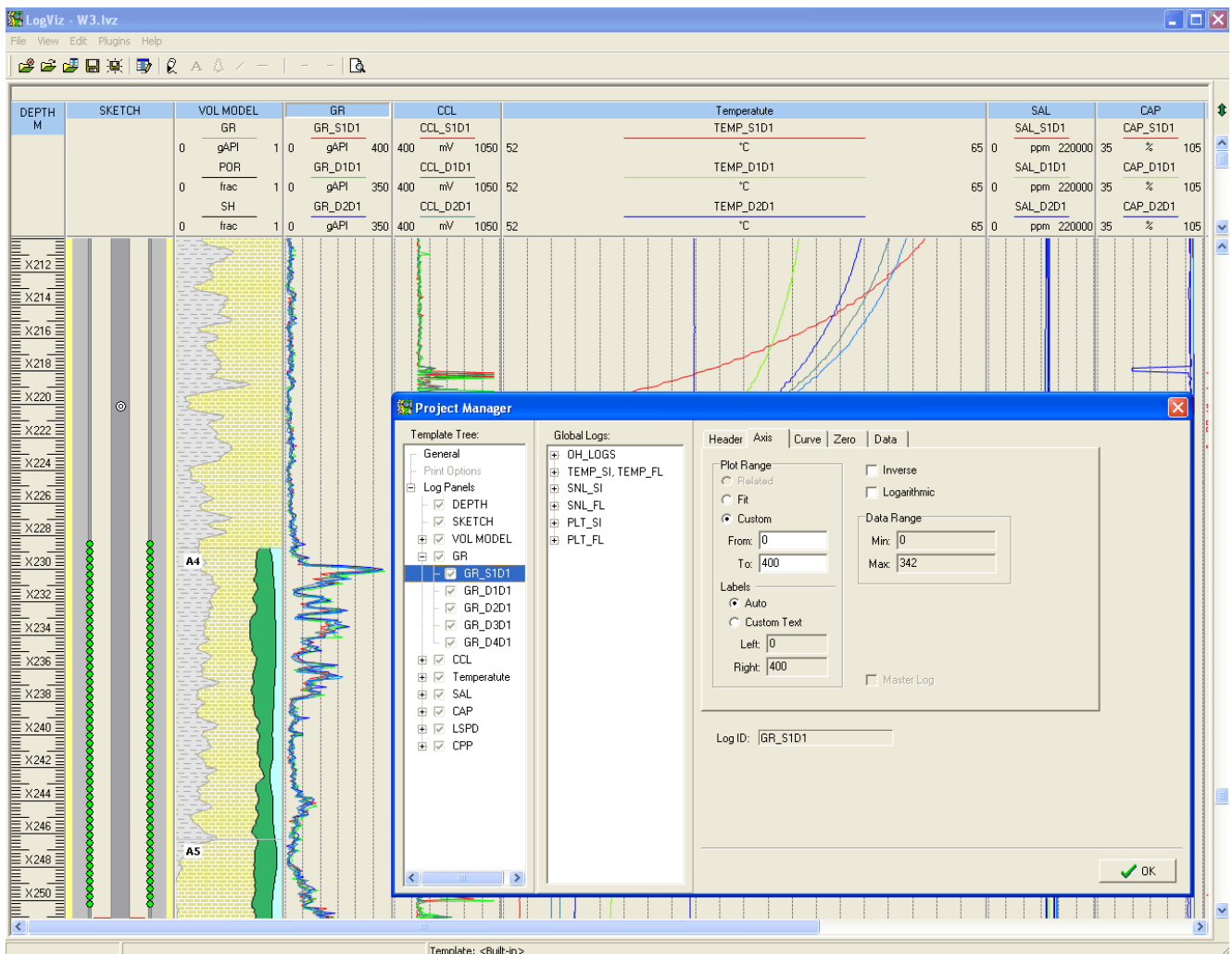


PROJECT MANAGER. LOG PLOTS

To govern the project, the Project Manager window can be used. It is comprised of the following components:

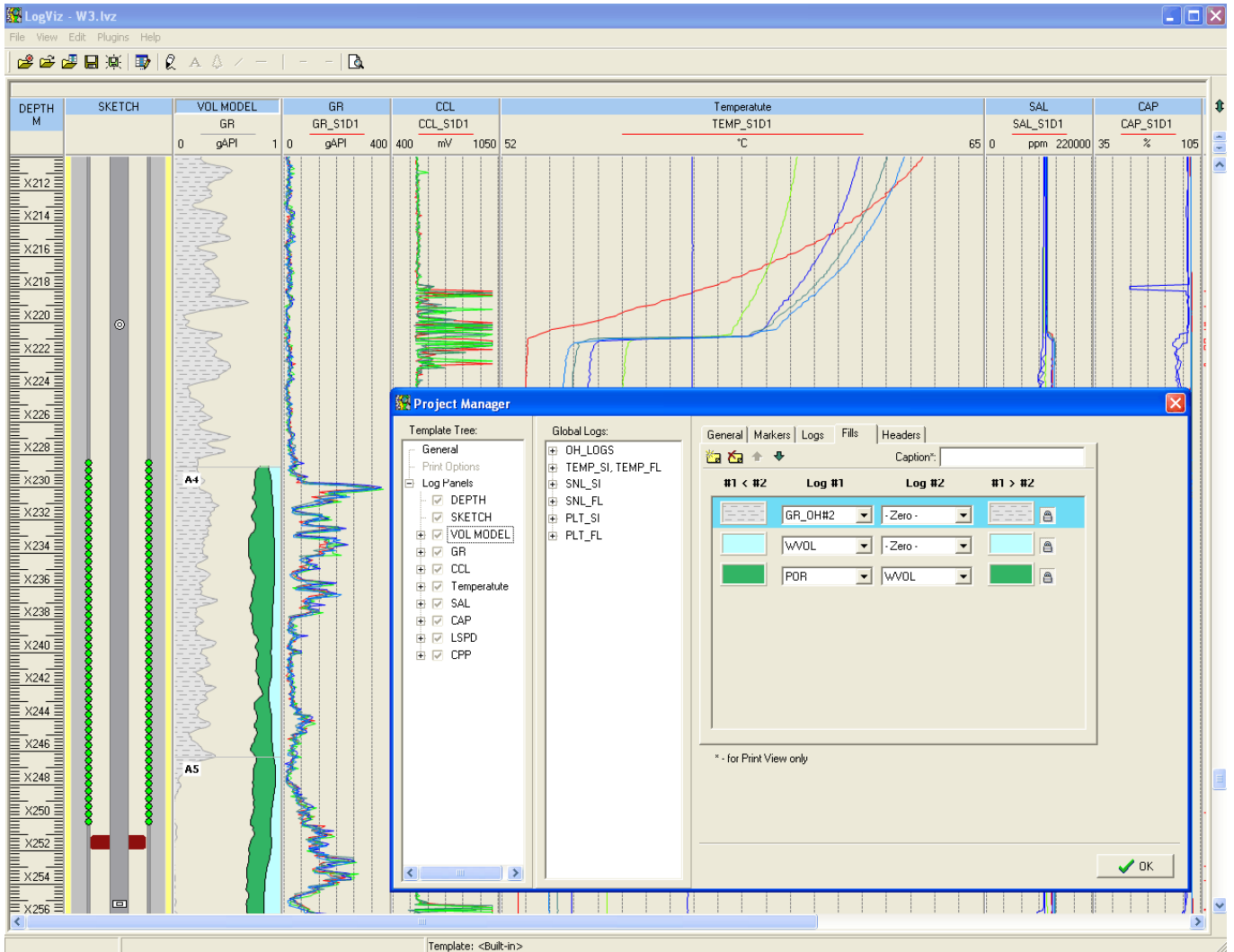
- the Template Tree list displaying the project's template structure as a tree of items representing mainly panels and log plots
- the Global Logs list displaying the project's logging data structure as a tree of log items grouped into datasets by their source (a file or plugin output)
- a tabbed settings dialog for an item focused in the above-mentioned lists

To make a log plot, the user can create a panel and attach a log from the Global logs list to it. Then the appearance of the plot can be adjusted on a number of tab pages of the log settings dialog.



LOG PANELS

The panel settings dialog provides a means of displaying log plots on a panel jointly, such as setting a common plot range, filling areas between plots, etc.



FORMATIONS PANEL

To describe the lithological column, the user can create the Formations panel. Its Data tab page allows adding formation items and defining their depths and unique identifiers responsible for their appearance on a plot.

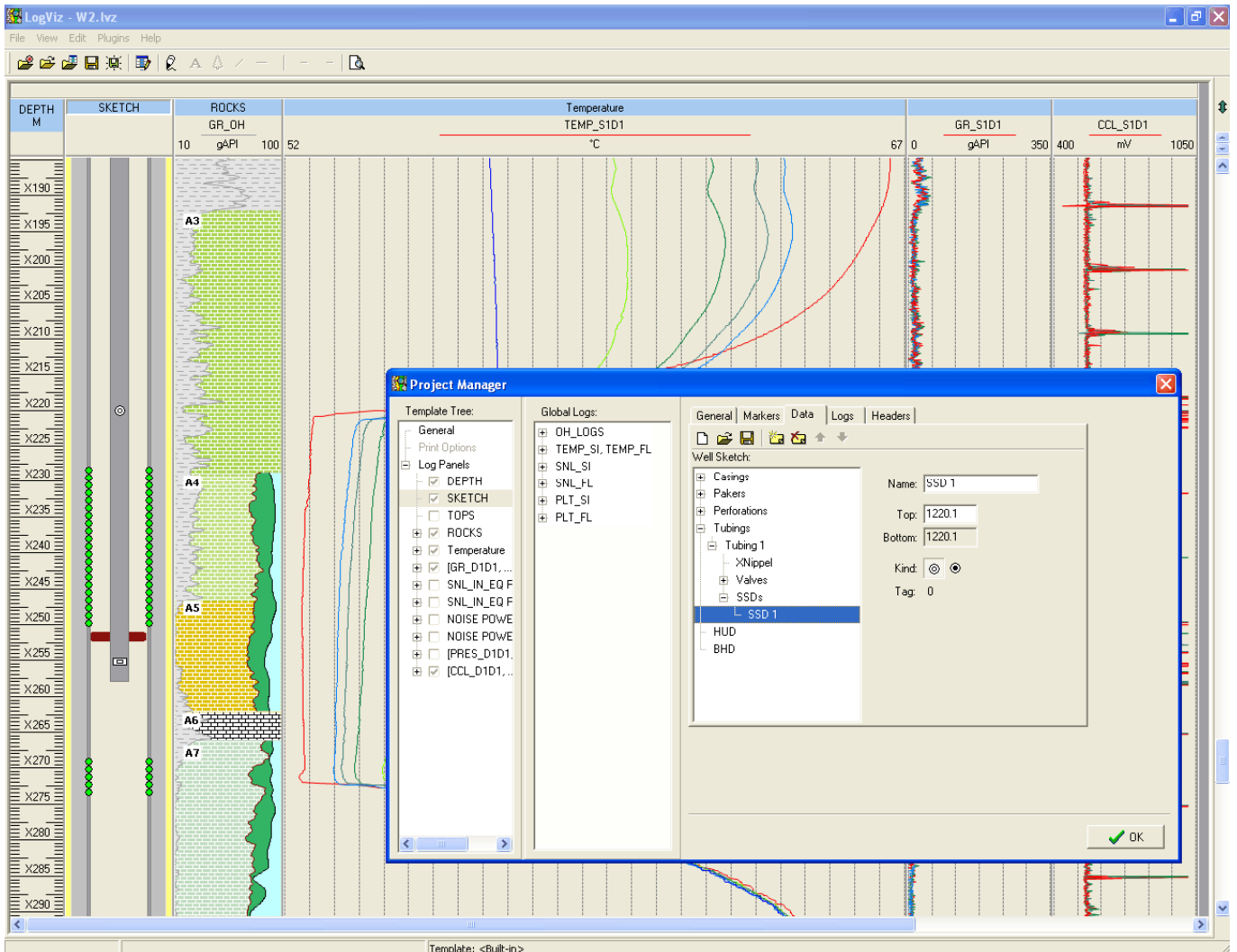
The screenshot displays the LogViz software interface. The main window shows a lithological column with various layers labeled A5 through A13 and A20. A 'Project Manager' dialog box is open, showing the 'Formations' tab. This tab contains a table with the following data:

No.	Top	Bottom	UID	Name	Pattern
1	34.5	1	A1		
2	37.0	2	A2		
3	39.3	3	A3		
4	31.3	4	A4		
5	38.1	5	A5		
6	51.1	6	A6		
8	57.3	8	A8		
9	31.8	9	A9		
10	30.6	10	A10		
19	32.8	19	A19		
11	16.8	11	A11		
12	19.6	12	A12		

The 'Project Manager' dialog also includes a 'Template Tree' on the left and a 'Global Logs' list on the right. The 'Formations' tab is currently selected, and the 'Select Pattern' dialog is also visible, showing a list of patterns for selection.

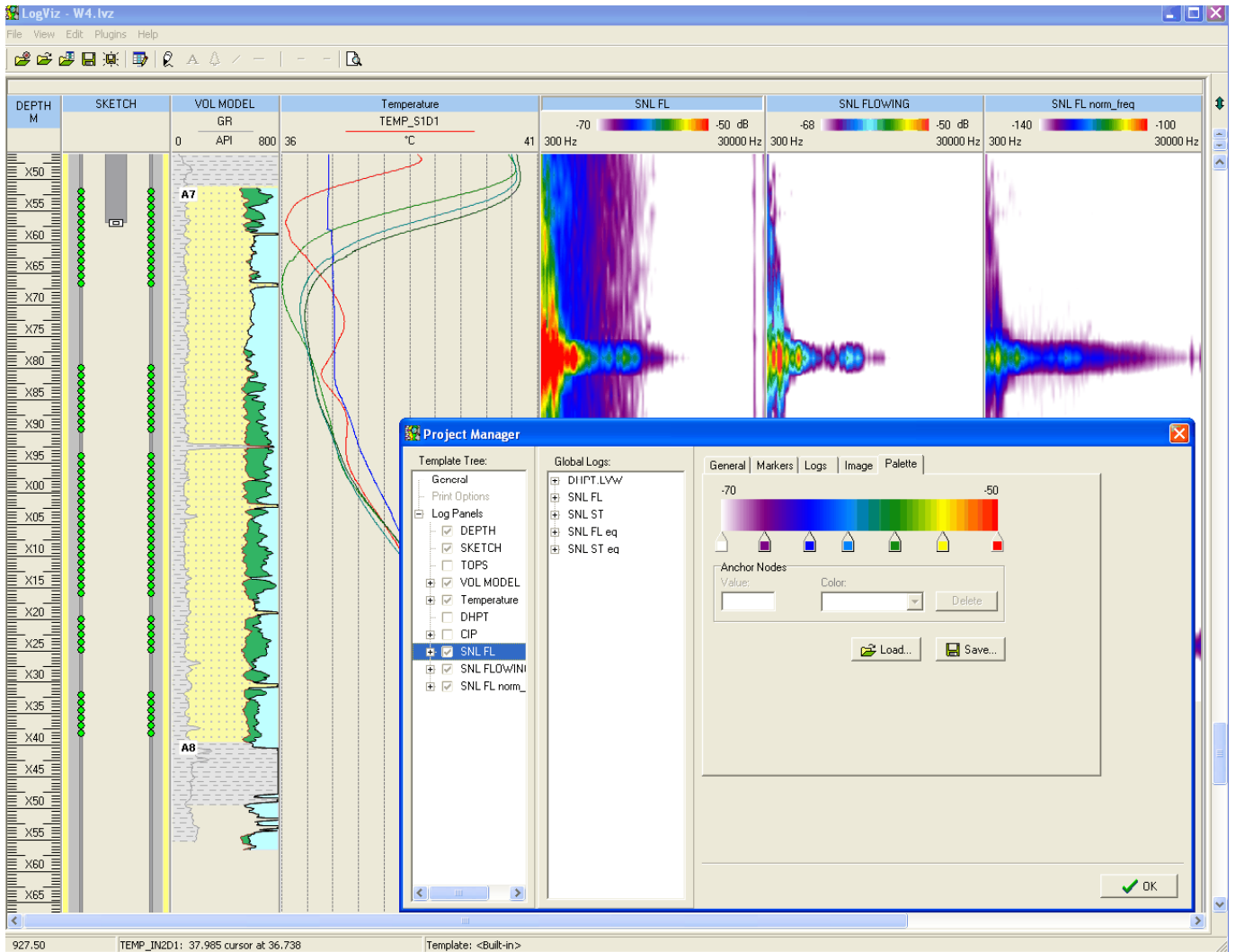
WELL SKETCH PANEL

To describe the well, the user can create the Well sketch panel. Its Data tab page allows adding the well's elements (casings, tubings, perforations, packers, etc.) and defining their position and some details.



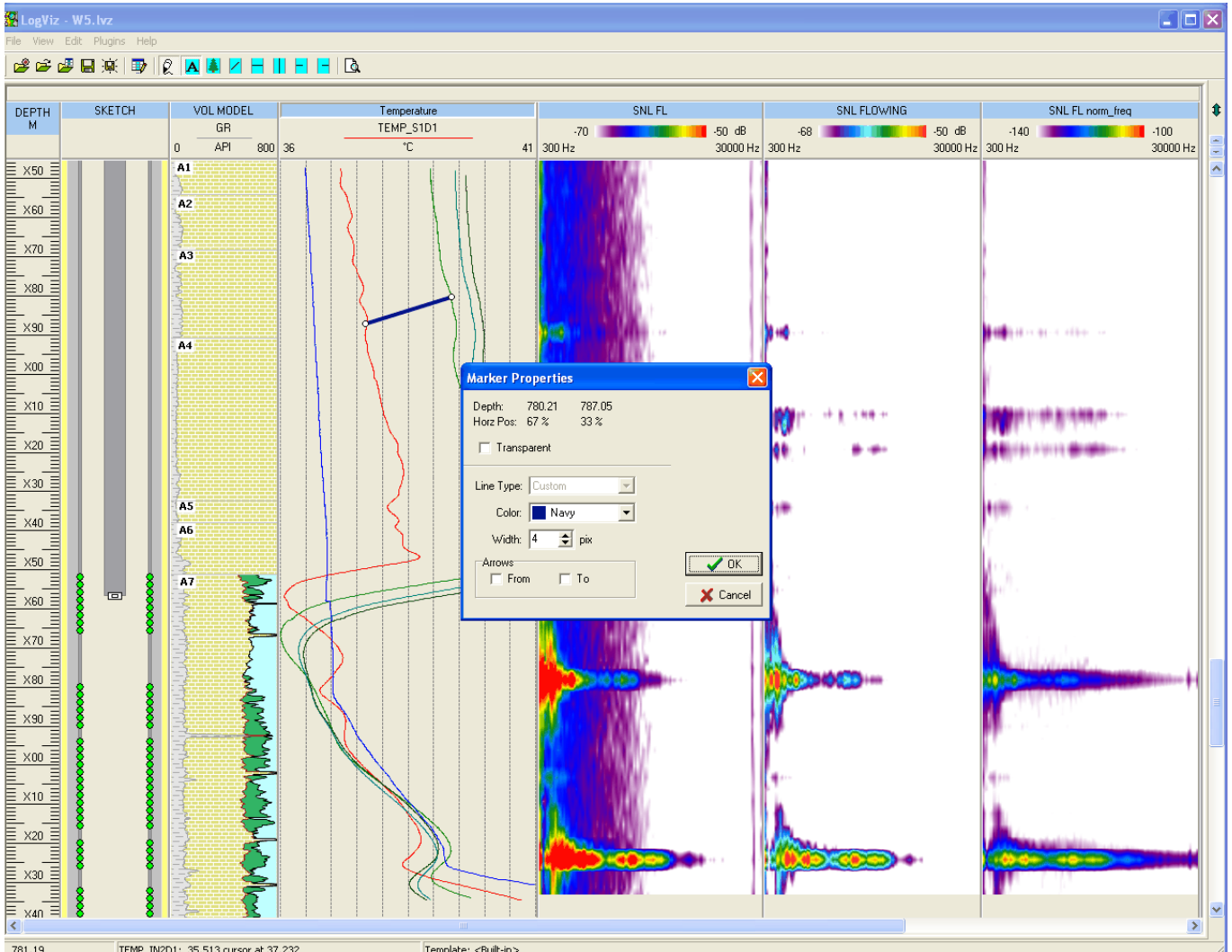
COLOR IMAGE PANEL

For a series of associated logs such as multi-channel data (also called image logs), a special Color Image panel can be employed. Panels of this type display logs as a series of vertical colored bands, with a color of each data point selected by its value from a palette table.



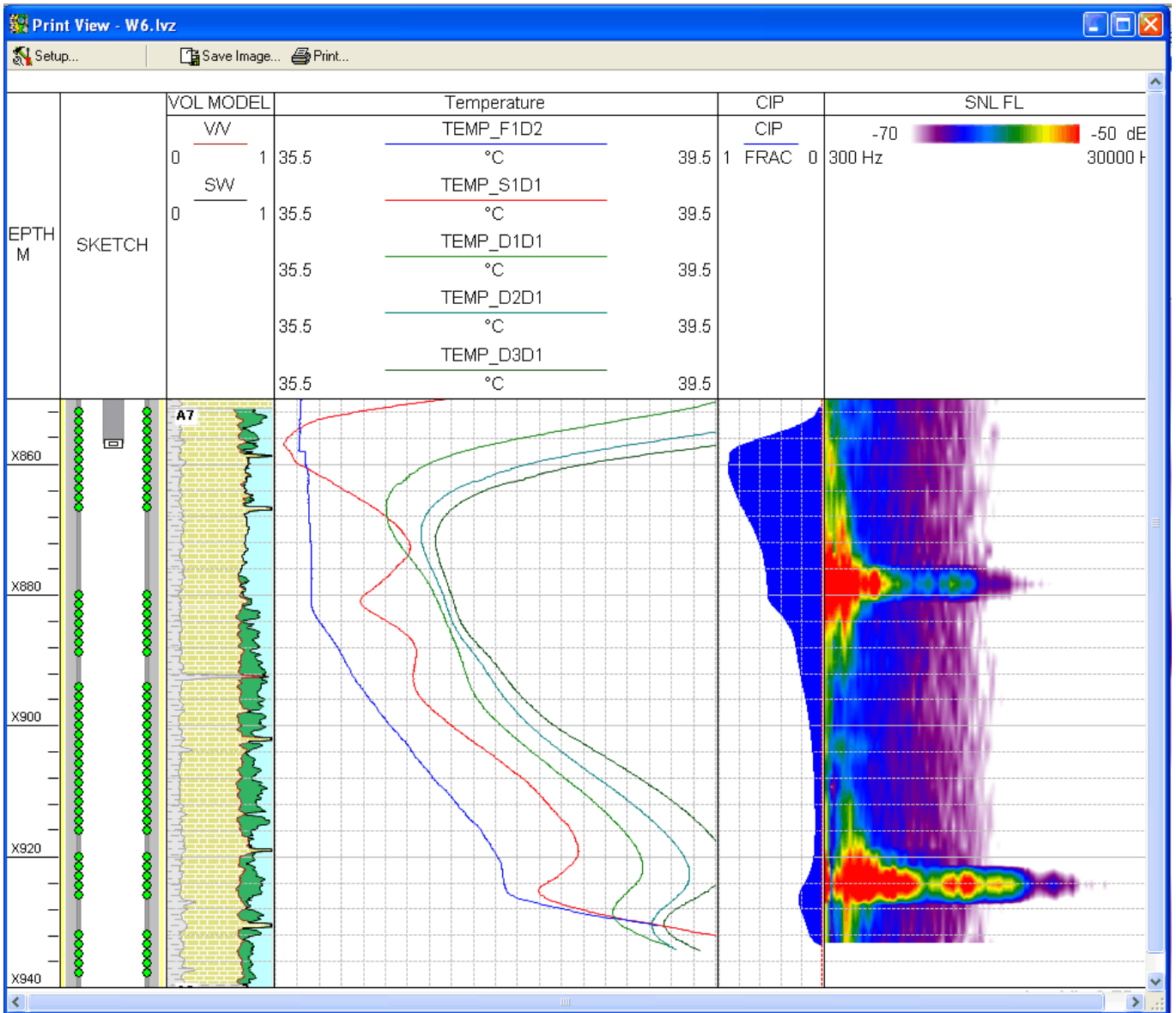
MARKERS

To make an additional graphic formatting of output, some graphic primitives called markers may be used. These are multi-line text frames, lines, arrows, and pictures from bitmap files. A marker of a type selected on the Toolbar may be created with a mouse click and adjusted in its properties dialog.



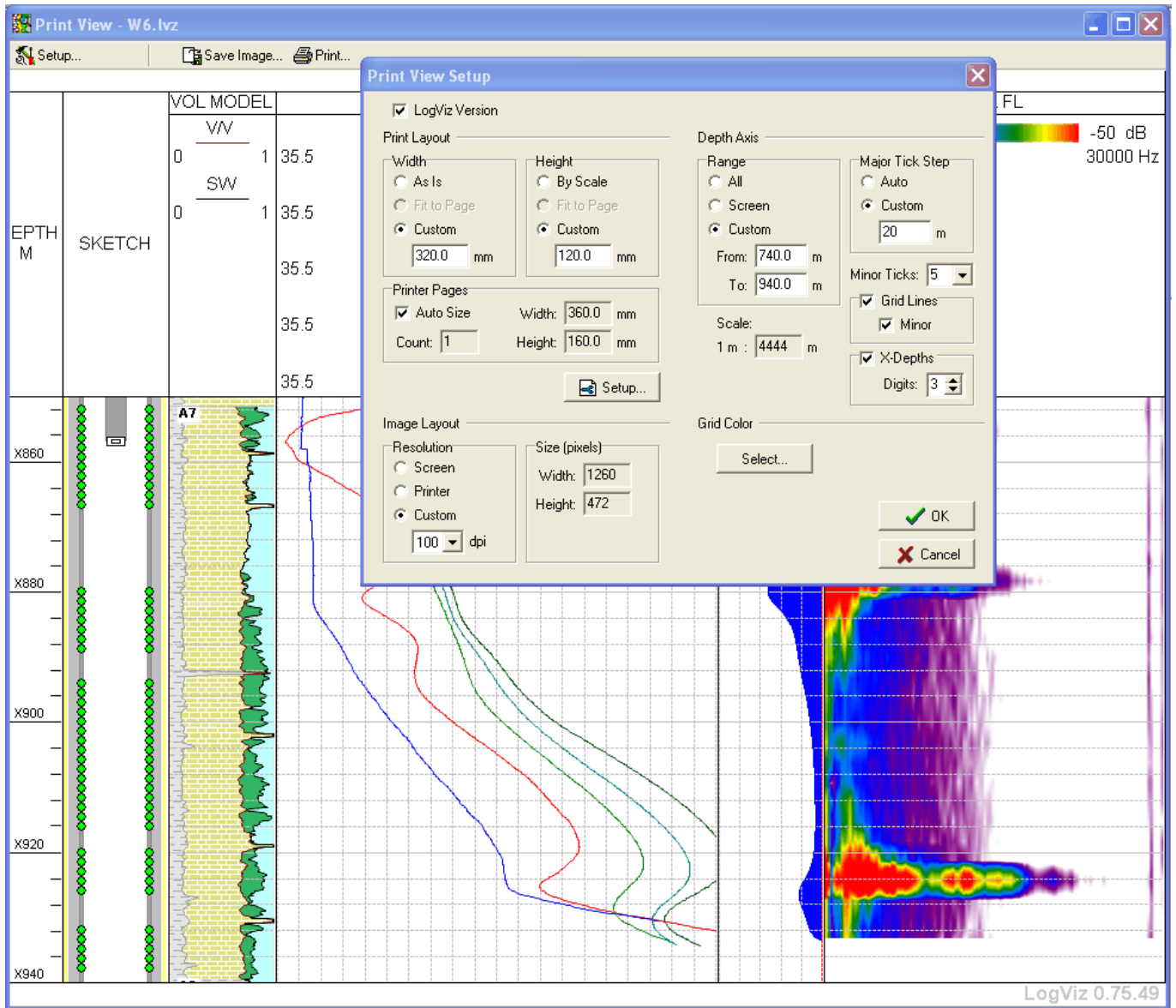
PRINT VIEW

To output the document as an image file or a printed copy, the Print View window can be used



PRINT VIEW SETUP

The size, depth scale, resolution, and paging options of the output document can be set in the Print View Setup dialog. Besides, it contains a number of additional settings concerning the appearance of the document.



SCRIPT LAUNCHER

The loaded data may be processed in plug-ins in a task-oriented way. Of special type of plug-in is Script Launcher which allows accessing the data within a VBScript or JavaScript code.

