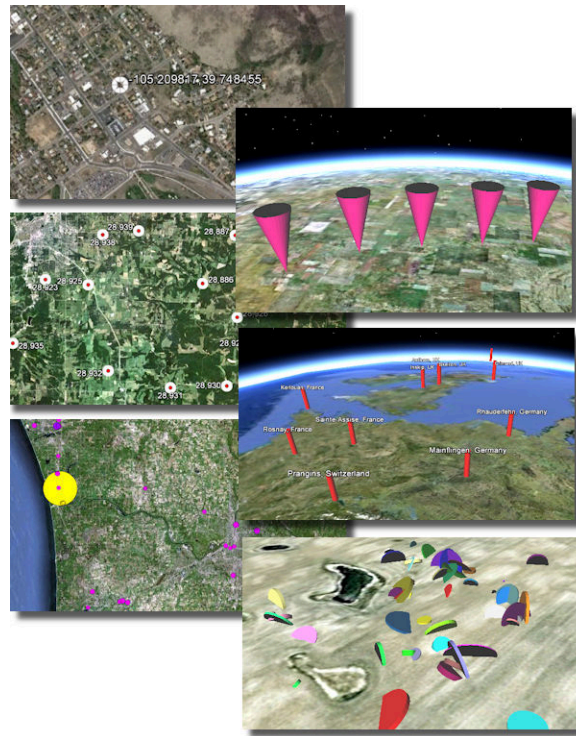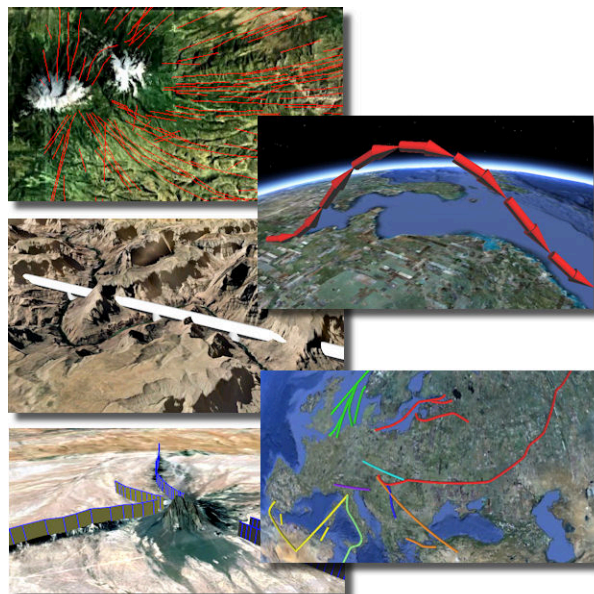# New Features in RockWorks16

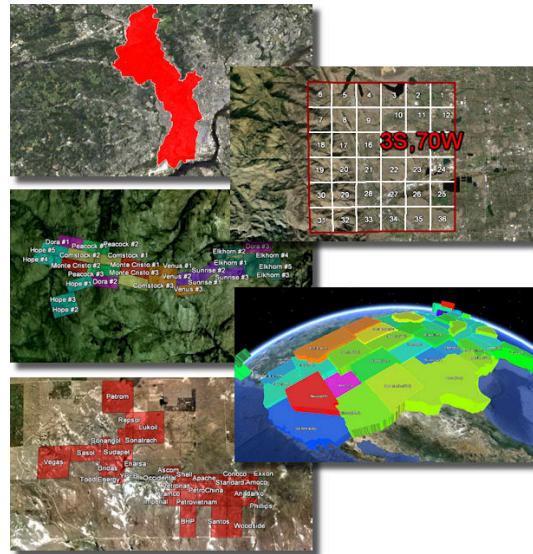## New RockWorks EarthApps - Output spatial data to Google Earth

- Point Maps: Display map locations with icons, circles, cones, cylinders, and strike and dip symbols.
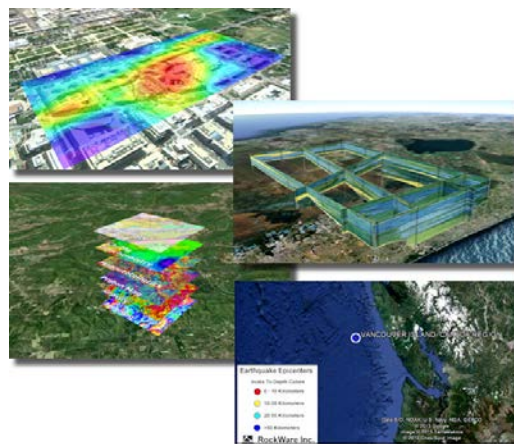


- Line Maps: Display lines, polylines, tubes, parabolas, and pipelines in Google Earth.

- Polygon Maps: Display polygons, claims, leases, PLSS sections, and U.S. state and country outlines in Google Earth.
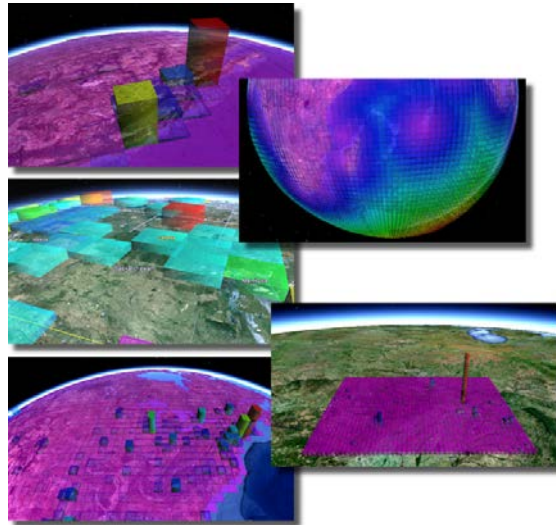


- Images: Display images as draped on the ground, floating, vertical, and as legends.



- Flyovers: Create simple and advanced, forward-looking or circular flyovers in Google Earth.

- Cellmaps: Create maps of spatial data to illustrate highs, lows, averages, weighted averages, etc.



- Survey maps: Compute and display point locations and polygons from survey data.



## New Coordinate Options

- Define project units and coordinate system for new and updated project databases.
- Map (XY) and depth (Z) units can be mixed (e.g. meters and feet).
- Project dimensions now represent Output Dimensions, and units are defined. Area, volume and mass units are also defined.

*Borehole Manager Location Coordinates*

- Define units and coordinate system for spatial columns in the utilities datasheet.
- Coordinate conversion options have been added to all import tools.



*Utilities datasheet - coordinate headings*

- Relabel coordinates for existing data/projects.
- Reproject coordinates for existing data/projects.
- Volume reports use project units



*Relabel or reproject coordinates*

# New Diagram Types and Improvements

- New Stratigraphy Rules provide smarter cross sections and stratigraphy models.
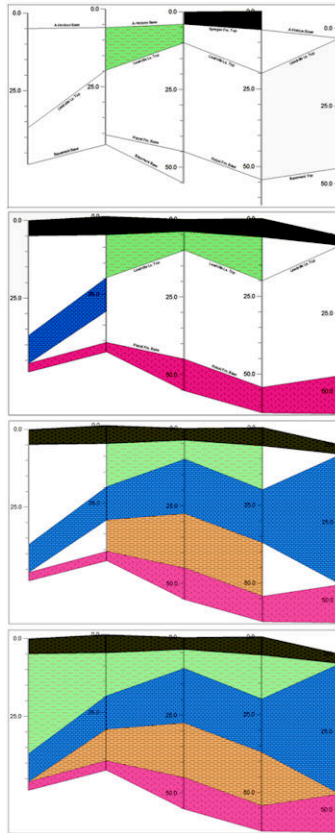


*Stratigraphic Cross Section*

- "EZ" P-Data, I-Data, Stratigraphy correlation panels in striplog sections.
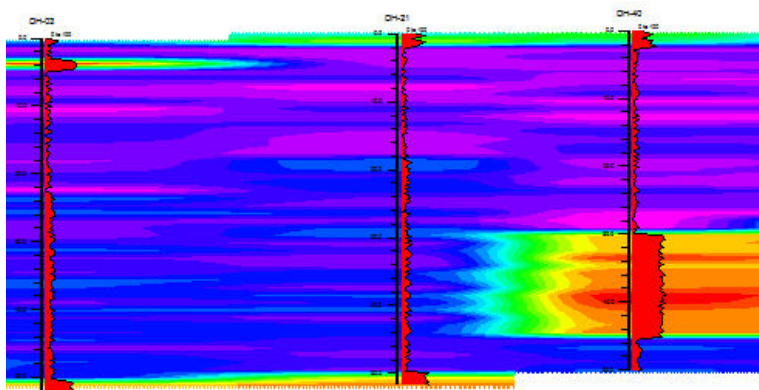


*P-Data correlations in log sections*

- Improvements to the Stratigraphy Picker and Lithology Picker programs
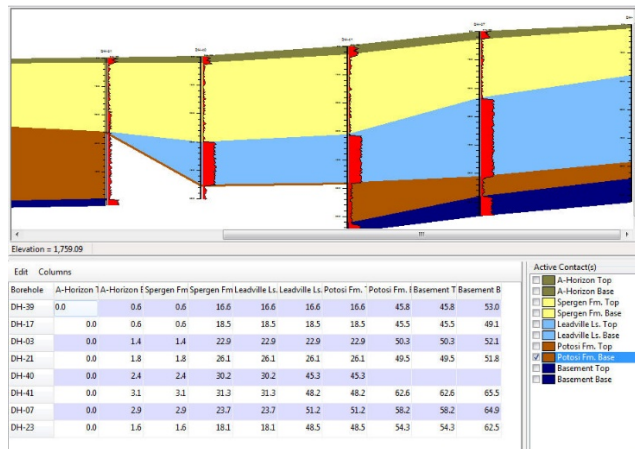


*RockWorks stratigraphy picker*

- Display faults in sections and profiles
- Distance labels -or- coordinate labels in profile diagrams
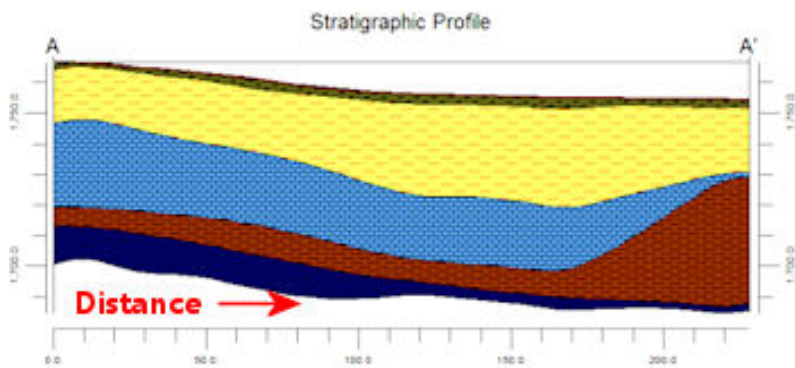


*Distance labels in Stratigraphy Profile*

- Claim area and lease area calculators
- Polygon maps: multiple polygons, claim maps
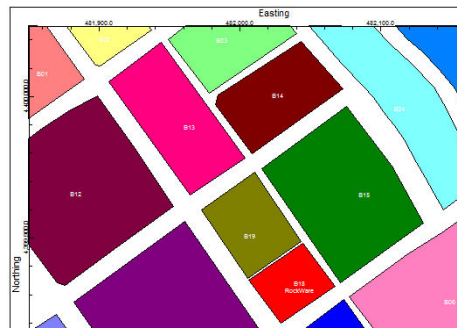


*Polygon Map*

- Automatically plot Horizontal Reference Lines on Sections and Profiles.
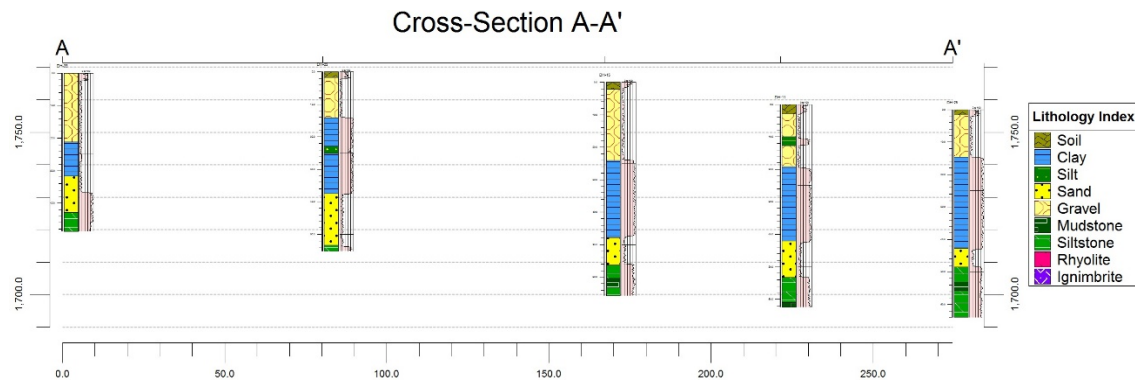


*Horizontal Reference Lines in cross-section.*

- New option to plot symbols with curves or connecting lines based on P-Data.
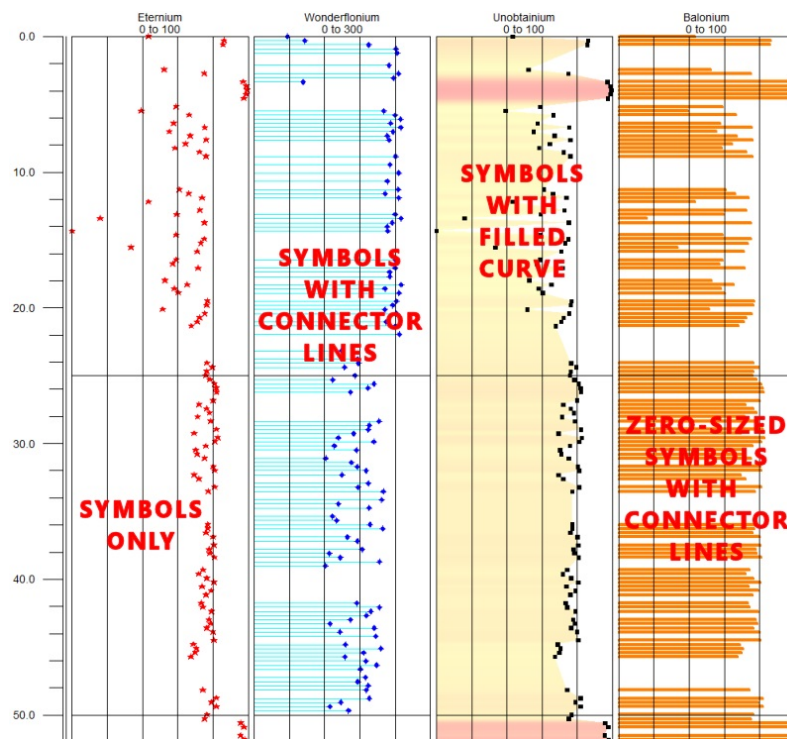


*New Symbol Options can be used to show geophysical data, geotechnical parameters, and more.*

## Striplogs

- New color-fill options for 2D Curves. Fill in either the vertical or horizontal directions.
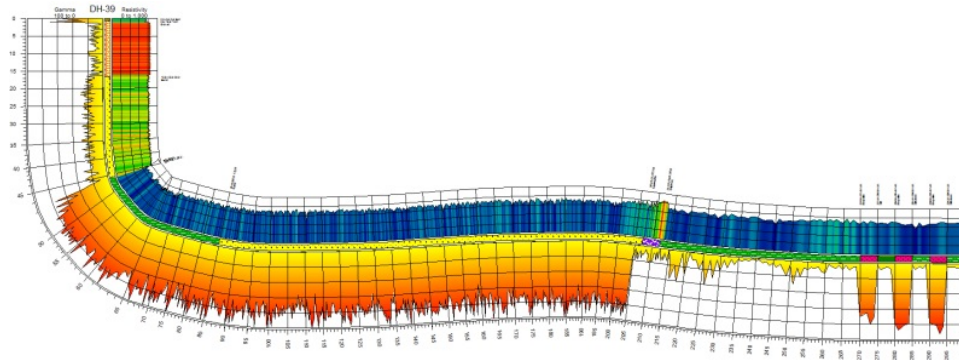


*New colorfill options for 2D striplog curves.*

## Modeling

- Model Distance to Closest Intersection based on fracture data.



*Fracture Modeling in RockWorks16*

- Dip Gridding biases the surface modeling based on the dip-direction and dip-angle of the control points.

*RockWorks Dip Gridding*

# Borehole Manager Features

- New layout of the Location tab – better organization.
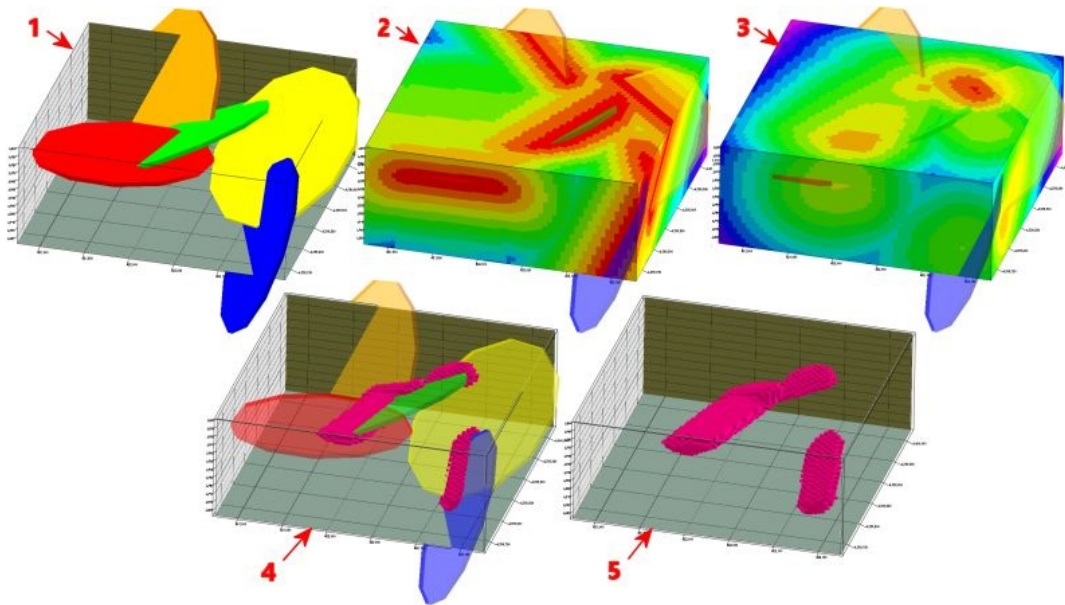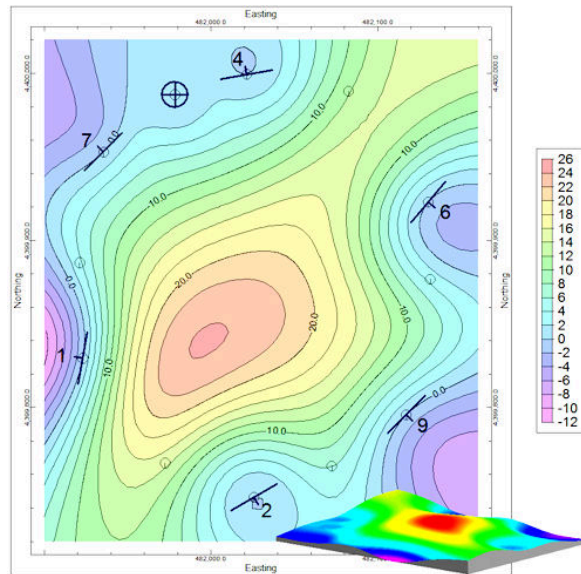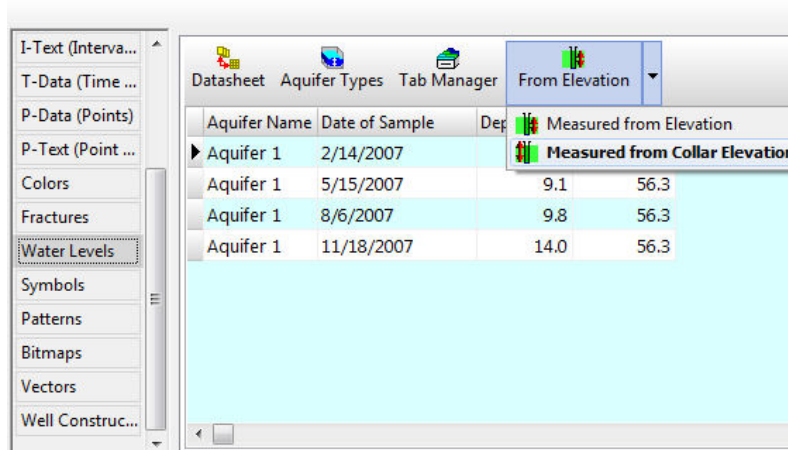- Customized Location fields on their own "groups" or tabs for great flexibility,



*Borehole Manager Location tabs for custom fields*

- Improved hole sorting options so enabled can show at top and boreholes can be easily grouped.
- Search for boreholes, hide disabled holes.
- Each database table can be referenced to the ground or collar elevations.

*Choose ground or collar elevation for each borehole table*

- Lithology, Stratigraphy, Water Level, Well Construction descriptions and Comments are now "memos" with unlimited content.
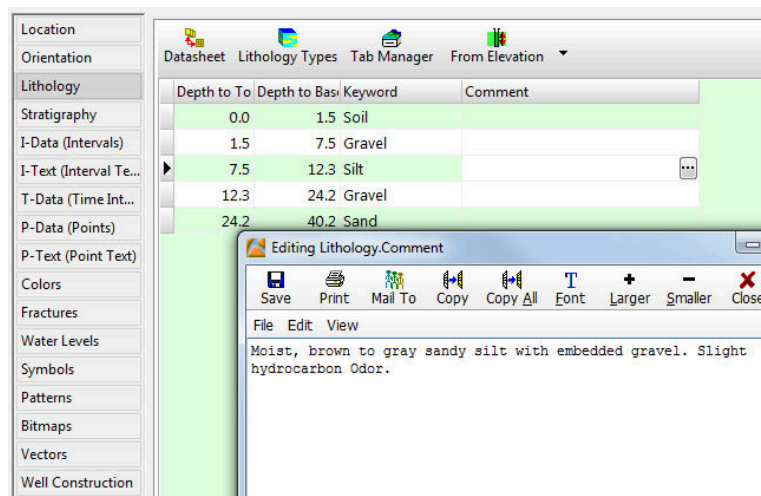


*Longer "memo" descriptions*

- Easily re-order I-Data, T-Data, P-Data, I-Text, P-Text columns (and they'll be remembered). Hide them, too.

## EarthApps and Utilities Datasheet

- Row checkboxes – unchecked items will not be processed.
- Filter rows based on Output Dimensions and Polygons.

*RockWorks Utilities Datasheet*

- New column types in the Utilities datasheet.
- Specify coordinates and units.



*Utilities and EarthApps datasheet column types*

- Store metadata with your datasheets.



*Utilities & EarthApps datasheet - metadata*

- Specify numeric format (regional numbering systems).
- Save / load datasheet layout templates.

## RockPlot2D Updates

- Expanded Google Earth export tools - export cross sections as vertical panels, maps as floating or draped, etc.
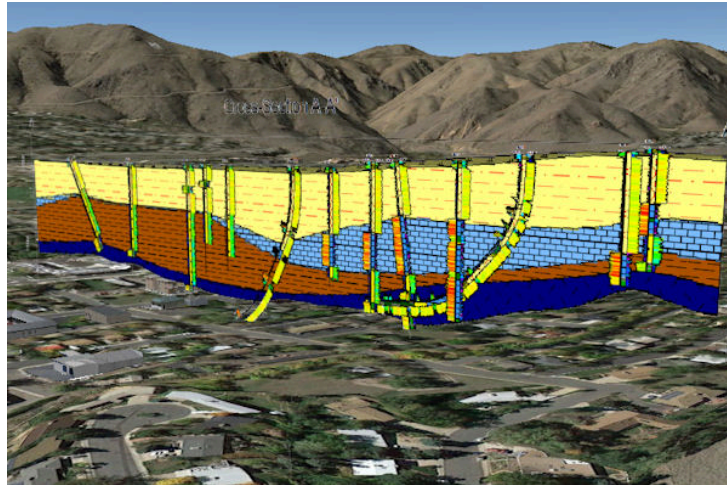


*RockWorks cross section in Google Earth*

- Diagram type saved in RockPlot2D files: unknown, map, section/profile, chart
- Diagrams store coordinate system and units.
- New tools in RockPlot2D to hand-draw correlation panels. Includes "snap" nodes in logs, snap to lines.
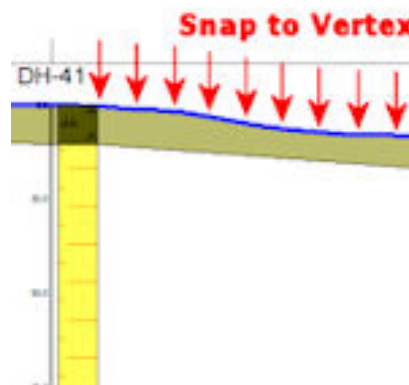


*Snapping tools in RockPlot2D*

- Add vertices to polygons and polylines
- Establish a default font for 2D graphics; edit them individually in the plot window.
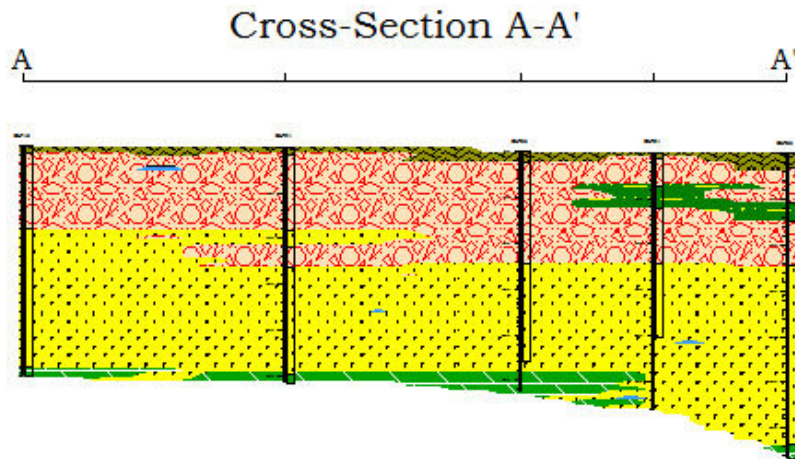
*Fonts in RockWorks 2D Diagrams*

- Apply transparency to color-filled or pattern-filled polygons.
- 2D color legends include scientific notation and prefixes & suffixes
- Now include fills in vector patterns!



*RockWorks cross section with fills in vector pattern*

# RockPlot3D Updates

- Color schemes for 3D diagrams can be defined before they are created.
- Expanded Google Earth export tools.
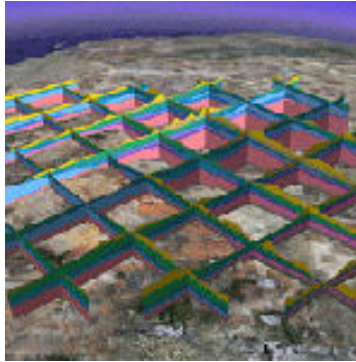


*RockPlot3D - 3D Fence exported to Google Earth*

- Add titles and logos to 3D scenes.



*RockPlot3D logos and labels*
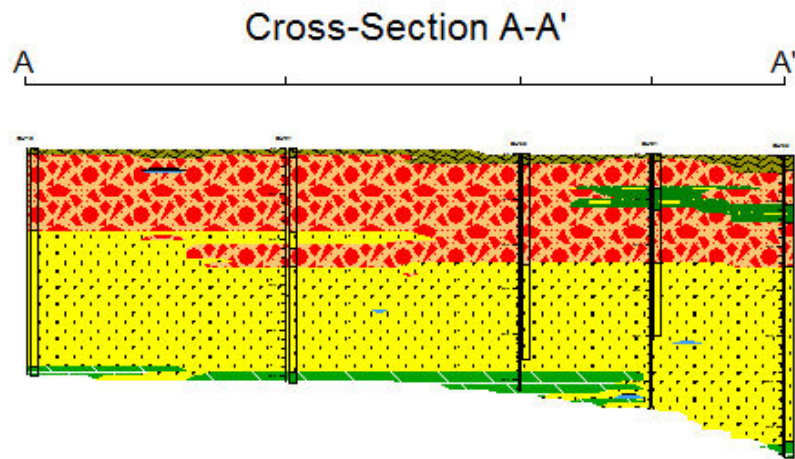
- Extract grid models from Rw3D scenes.
- Store one or more viewpoints for quick restoring of view position and angle.



*RockPlot3D – Save Viewpoints*

- Save Vertical Exaggeration in Rw3D scenes.
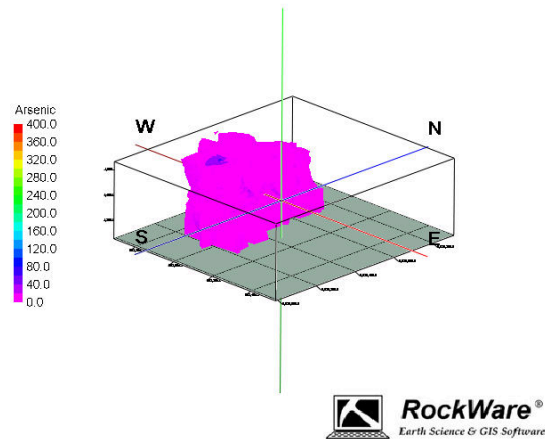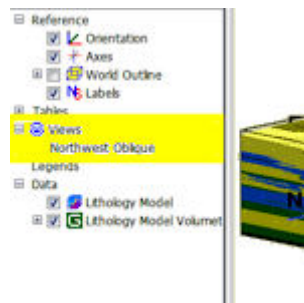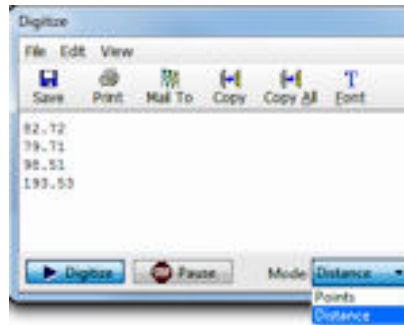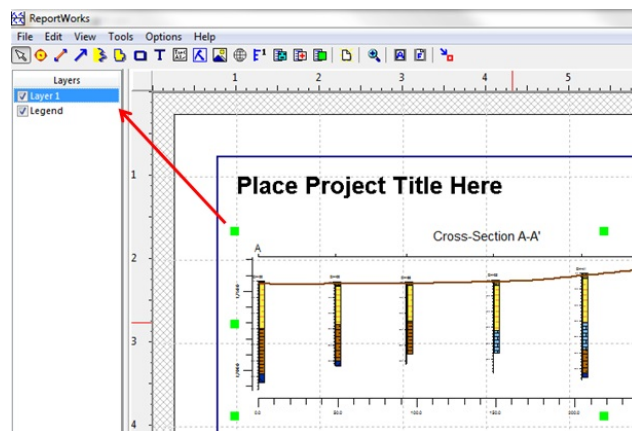- Capture distance as well as XYZ coordinates in RockPlot3D window.



*Digitize coordinates and measure distances in RockPlot3D*

## ReportWorks

- Editing is easier than every, with new freezable layers.  Select a Layer to freeze other layers, or select no layers to access all objects.



*ReportWorks now includes an option to freeze layers.*

## System Improvements

- New network license manager
- Installation program offers options for user and sample file locations
- Wildcard names for file paths
- Unicode support of non-Latin alphabets
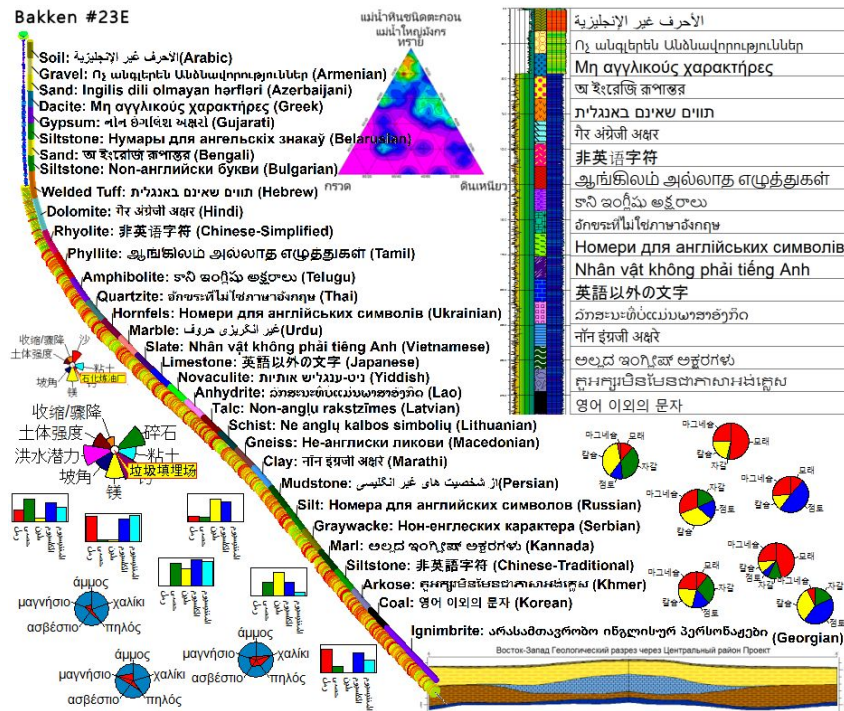
*RockWorks graphics supporting non-Latin alphabets*

- More consistent support of non-US number formats
- Project notes support RTF (Rich Text Format) thereby allowing for multiple fonts, font effects, and embedded imagery.
- User-specific menu settings for shared project folders.