HydroGeo Analyst 4.0

- ■ **Expanded Data Connection to Popular Industry Programs**
- ■ **Vast Improvements to Core Functionality**
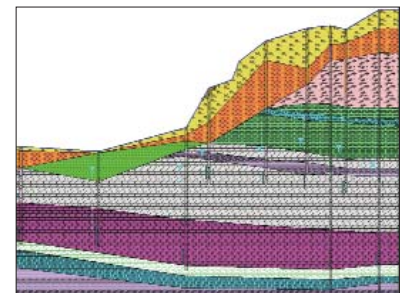- ■ **More Graphical Display Options**

Organize your data, streamline project workflows, and deliver projects more efficiently with HydroGeo Analyst

HydroGeo Analyst (HGA) is the only groundwater and environmental desktop software solution that consolidates a wide range of functionality and capabilities into a single working environment. From borehole logging and mapping, to cross-section interpretation and three-dimensional visualization, HydroGeo Analyst seamlessly provides the core tools necessary for delivering projects. Now, HydroGeo Analyst v.4.0 offers even more!
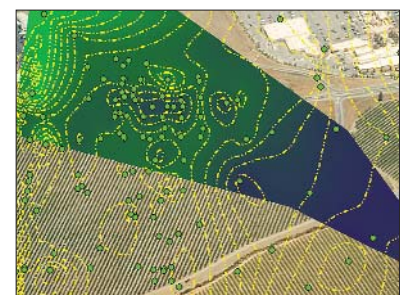

Flexible cross-section functionalities

What's New in v.4.0?

- ■ Dramatically improved Map Manager functionality (scale, legends, color shading, plots, etc.)
- ■ Expanded control in Cross-Section Editor (legend display, axis control, printing scale, etc.)
- ■ Refreshed Borehole Log Plotter (redesigned GUI, enhanced graphical display settings, etc.)
- ■ Greater control over time series charts and cross-tab queries
- ■ More unit options for storing field and laboratory data
- ■ Connect HGA projects directly to **AquiferTest Pro** for indepth analysis of aquifer properties
- ■ Communicate between HGA and **AquaChem** for advanced aqueous geochemical analysis
- ■ Quickly develop input data for **Visual MODFLOW** and **FEFLOW**® (model layers, maps, etc.)
- ■ Import **Diver*** datalogger files for indepth investigations, mapping, and reporting
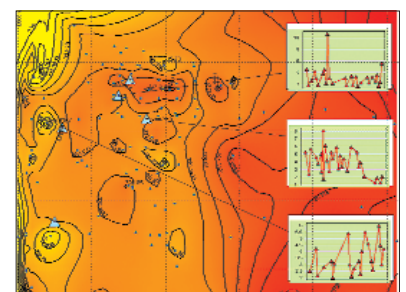
For more information or to obtain a demo, please call (519) 746-1798.

Perform color shading and contouring

Display summary results in the Map Manager

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User Access Management
- Application Level - control permissions to features such as creating new projects, backing up and restoring databases, etc.
- Project Level - control access to individual projects and the various tasks (eg. data access, maps, queries, templates, etc.)
- Create and manage user groups (eg. create, edit, delete user groups, and add, remove, edit, users into existing user groups)
- Enforce access levels assigned to each user group

Data Transfer System
- Import data from virtually any source including: Text files (CSV), MS Excel™ (XLS), MS Access™ (MDB), SQL™ Server
- Import data directly into pre-defined database templates for widely used environmental database schemas
- Quickly export data to various formats including text, spreadsheets, MS Access database, SQL Server
- Easy exchange of data between GIS and CAD environments

Data Exchange
- Import Diver .MON files to display and interpret data *NEW*
- Exchange data from HGA into AquiferTest Pro to analyze water level data and characterize hydrogeological units *NEW*
- Link water quality data with AquaChem for in-depth analysis *NEW*
- Prepare and manage Visual MODFLOW input data in HGA for conceptual model development *NEW*
- Pre-process data in HGA for use in FEFLOW® geologic models *NEW*

Queries
- Develop advanced queries for virtually any parameter
- Export crosstab queries to PDF, HTML, or MS Excel™ format
- Efficiently map query results directly to the Map Manager
- Quickly generate simple or complex data statistics

Time Series Plotting
- Create time-series plots based on data queries
- Add best fit, trend, formula, or statistical lines to the plot
- Display uncertainty or detection limits
- Interactive, simultaneous display of multiple plot windows
- Display one or more water quality standard values as a line or symbol, for quick detection of samples that exceed the standards

Quality Control
- Analyze duplicate, spiked and blank samples:
  - Compare relative percent difference and coefficient of variation
  - Analyze percent recovery for spiked samples
  - Compare blank samples to method detection limits
- Execute a quality analysis on a selected dataset
- Save assessment results to a MS Excel™ spreadsheet
- Define one or more lab quality assessment templates
- Monitor unit inconsistencies and filter anomalies

Chemistry Data
- Create sample schedules including sample locations, media, dates and parameters to be measured
- Import analytical lab results from many file formats
- Seamless data validation and error checking during data import
- Display concentration data on time-series plots
- Conduct statistical analysis on your chemistry data using standard functions (AVG, MIN/MAX, STDEV, SUM, VAR, etc.)
- Display summary results with exceedences highlighted on the GIS map

GIS Map Manager
- Create and export colour shaded maps to display data *NEW*
- Display timeseries plots linked to stations on maps *NEW*
- Choose intersecting layers to create new layers *NEW*
- Group layers in the legend to help simplify map data management *NEW*
- Create contours using selected stations and/or restrict the lines to a digitized shape *NEW*
- Improved legend for displaying layer details with graduated or value rendering *NEW*
- Add grid lines to maps to pinpoint exact locations of interest *NEW*
- Import maps with accuracy using two to three georeference points *NEW*
- Import and display raster data (DEMs, Surfer and ESRI® grid files) *NEW*
- Import an array of basemap formats
- Quickly contour data from pre-defined queries or station data
- Interpolate any data layer(s) and generate grided data files to visualize in 3D-Explorer
- Display summary results on map in a tabular format, and modify display properties of table (color, style, fields)

Cross-Section Editor
- Import cross-section lines from shapefiles *NEW*
- Modify cross-section buffers, axis or vertical exaggeration *NEW*
- Pan and zoom while defining cross-section lines and snap lines to stations with a click of the mouse *NEW*
- Reorder cross-section legends for highlighting important cross-section features *NEW*
- Set desired printing scale of cross-section *NEW*
- Use DEM data to display true topography between wells *NEW*
- Create geological, hydrogeological, and model interpretations
- Interpret model layers for use in groundwater models
- Query and map interpretation results (eg. overburden thickness)
- Display borehole log plots directly on cross-sections (e.g. display geophysical plots on the cross-section to assist in the interpretation)
- Select standard or custom cross-section fill patterns

Borehole Log Plotter
- Display well nests, reducers and telescoping casings *NEW*
- Display selected water levels (max, min, avg, first, last, etc.) with customized symbols *NEW*
- Display annular fills in boreholes and between piezometers *NEW*
- Customize display settings (casing color, image patterns etc.) *NEW*
- Display multiple data series on a single borehole log plot column to better display depth profiles for multiple contaminants, downhole geophysical logging data, or other depth dependent data
- Borehole logs are mapped directly from the data source
- Choose from a selection of pre-designed borehole log templates

HGA 3D-Explorer
- Render colorful, high-impact, 3D cross-section views
- Display 3D plumes directly from source data
- Generate static or transient plumes for one or more contaminant(s)
- Create .AVI animation files for use in presentations
- Calculate volumetric results based on the isosurface values
- Display concentration color maps along a cross-section line or horizontal YZ, XZ plane, and specify cut-off limits
- Display concentration contour lines with multiple property options

Report Editor
- Create and save unlimited number of dynamic report layouts
- Incorporate data values, tables, logs, cross-sections, 3D views, maps, etc.
- Export reports to various file formats (eg. PDF, HTML, RTF, etc.)
- Dynamic linking of reports to HGA data and components automates the report creation process
- Supports MS Visual Basic™ Script and JavaScript events/expressions

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