



SWS Enews



Water Solutions in Perspective

April 2007

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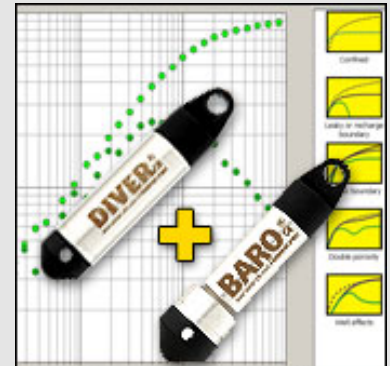
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Receive a **FREE** Baro-Diver with the purchase of one Aquifer Pumping Test Kit

[Learn more about the Aquifer Pumping Test Kit!](#)
Offer valid until April 30, 2007

Product News

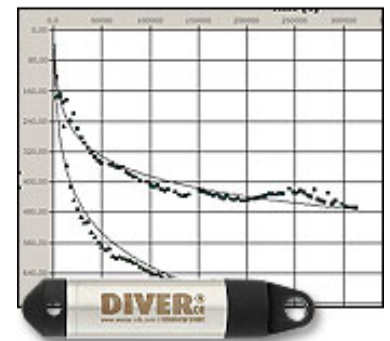
Groundwater Monitoring for Sustainable Use

Monitor | Control | Manage

Sustainable water supply requires a commitment to groundwater monitoring and the access to intuitive modeling technologies in order to effectively manage groundwater resources. Advanced groundwater monitoring instruments and modeling software offer today's water professionals the tools necessary for accurate and cost-effective management of aquifers around the world. Now efficiently manage all phases of your groundwater project with the Aquifer Pumping Test Kit. We have combined our industry trusted [Diver](#) dataloggers and [AquiferTest Pro](#) software for pumping test and slug test data analysis - allowing you to accurately record, analyze and report the hydraulic properties of your aquifer(s).

The Aquifer Pumping Test Kit provides the initial data for:

- achieving long-term water supply using high quality data to monitor water levels and quality



Theis Recovery Analysis and Micro-Diver

- minimizing impacts to potable water supplies from over pumping
- planning for urban and industrial development while maximizing groundwater recharge
- providing a greater understanding of present and future water demands
- assessing environmental impacts and protecting water supply in environmental sensitive areas such as fragile wetlands
- reducing or eliminating the dependency on alternative water supplies (i.e. pumping from lakes and rivers, desalinization etc.)

What's included with the Aquifer Pumping Test Kit?

- 5 x Diver dataloggers
- 1 x Baro-Diver (measures barometric pressure)
- 1 x license if [AquiferTest Pro](#) Version 4.1
- 5 x 30ft of Diver Data Cable (DDC)
- 1 x 3ft of Diver Data Cable (DDC) for Baro-Diver
- 1 x DDC to PC Interface cable
- 1 x LoggerDataManager software
- 1 x Pocket-Diver Manager acquisition, storage, and transfer PDA software

Aquifer Pumping Test Kit benefits:

- Minimize the need for continuous site visits - a major cost savings!
- Optimize your test results with more data points resulting in greater accuracy
- Diver dataloggers offer a robust, proven technology for collecting groundwater data
- Customize your pumping tests or use pre-determined pumping tests programmed within the Diver
- Efficiently analyze and report your pumping test or slug test data for quick, accurate results
- Variety of analysis methods available for added convenience

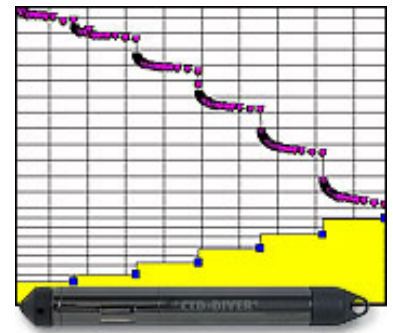
Learn more about Diver dataloggers - [Click here](#)

Learn more about AquiferTest Pro - [Click here](#)

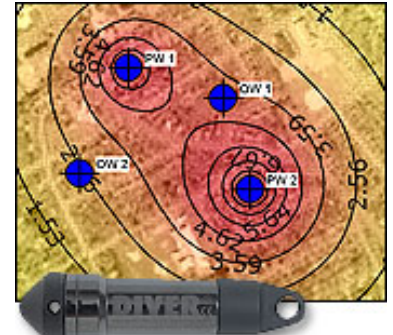
[Contact us](#) for a **Aquifer Pumping Test Kit** quote today!

Available in North and Latin America

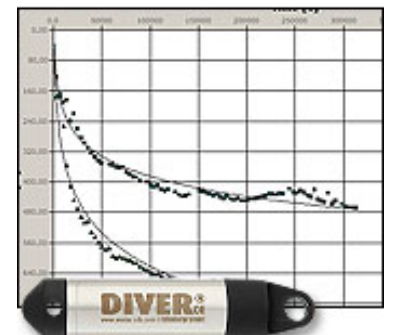
* - conductivity only available with CTD-Diver



Step Test and CTD-Diver



Pumping Test Analysis and Cera-Diver



Aquifer Pumping Test Bundle!
AquiferTest Software + Diver Dataloggers!



Fill out our [online form](#) to receive your complimentary Monitoring Services CDROM!

For more information, contact us:

Phone: +1-519-746-1798

Email: sws-sales@slb.com

Website: http://www.waterloohydrogeologic.com/equipment/groundwater_dataloggers.htm

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Consulting Services News

Groundwater Modeling in the Al Kufrah Basin and the Al Jaghbub Area

In 1953 the search for new oilfields in the deserts of southern Libya led to the discovery not only of the significant oil reserves, but also vast quantities of fresh water trapped in the subsurface. There are four major underground basins including the Kufra basin, the Sirt basin, the Murzuk basin, and the Hamadah and Jufrah basins.

The Great Man-Made River (GMR) project is intended to transport this large supply of water from these aquifers to the northern coastal belt, to provide a potable water supply for human consumption as well as irrigation. First conceived in the late 1960s, work on this project began in 1984. With an estimated 25 years to run, it was designed in to be executed in five phases. The General Water Authority (GWA), the governmental agency responsible for all water-related activities in Libya, recently investigated two prospective areas—in the Al Kufrah basin and in the Al Jaghbub area with the help of Schlumberger Water Services.

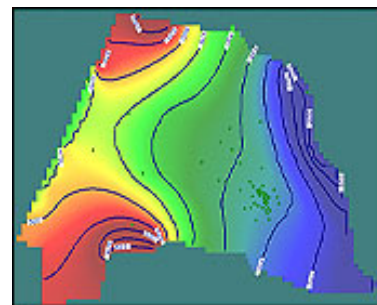
The challenges of this project include completing an accurate evaluation of the groundwater resources, to develop and build new agricultural settlements, and to design a new water-well field to be incorporated into the Great Man-Made River Project. This project is widely recognized as being the world's largest civil engineering venture. As a part of this mammoth undertaking, the Great Man-Made River Authority (GMRA) aims to extract and convey drinkable water to the highly populated coastal region of Libya.

The evaluation of the Al Kufrah basin and the Al Jaghbub area necessitated a comprehensive hydrogeological study and a groundwater modeling exercise in both areas. Due to the specialized nature of the task the GWA asked Schlumberger Water Services (SWS) to generate a numerical model to predict aquifer response to future water extraction and for advice on optimal design for the fields. The intention was to acquire the data, develop conceptual and numerical models, model calibration, and provide a full simulation of extraction and well field designs.

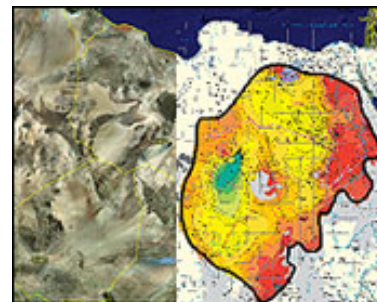
To learn more about Groundwater Modeling in the Al Kufrah Basin and the Al Jaghbub Area, [click here](#).



Paleo-Channel



Kufra initial conditions calibration



Nubian aquifer

SWS Exhibiting at Workshops & Conferences Around the World

Upcoming Events

- **CIM Mining Industry Conference & Exhibition 2007**
Dates: April 29-May 2, 2007
Location: Montréal Convention Centre, 1001 Jean-Paul-Riopelle Place
Booth Number: 1521



[Learn more about our Consulting Services!](#)

For more information, please contact:

Phone: +1-519-746-1798

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Website: www.waterloohydrogeologic.com/consulting/consulting_services.htm

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Training News

Environmental and Groundwater Modeling Course Line-Up

Schlumberger Water Services has finalized its calendar of training course locations and dates for 2007. We will be offering a full suite of Professional Short Courses on topics ranging from groundwater modeling using finite difference (Visual MODFLOW) and finite element (FEFLOW), to GIS data management for environmental professionals, aquifer performance test analysis, water quality data management, contaminated site risk assessment and regulatory review of hydrogeology studies. We will also be offering some specific customized courses that were tailored to meet the needs of specific industry sectors. As in other years, we will be offering all of our standard SWS "Open Enrolment" courses at our training facilities in Waterloo, Ontario, Canada as well as at various selected venues around the world.

If you are interested in one of our courses, or if you would like to discuss a customized "On-site Training Course", simply contact our Training Department at sws-training@slb.com and we will work with you to develop a course that provides the content, topics, laboratory exercises and software that you require.

Can't make it to one of our Open Enrollment Courses? Call us about our [On-Site Custom](#) Courses designed to suit your specific needs!





[Download our 2007 Training Course Schedule!](#)

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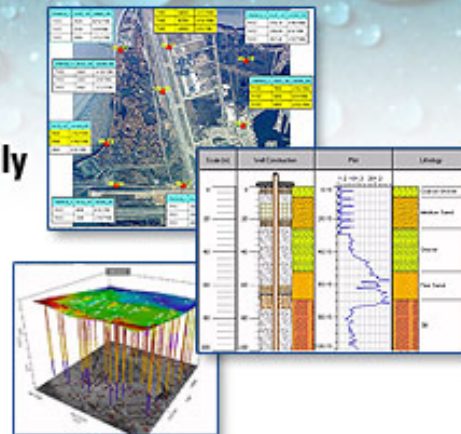
TRAINING COURSE SPOTLIGHT!

Making Sense of Environmental Data with HydroGeo Analyst

Understanding Data Sources, Data Analysis and Visualization



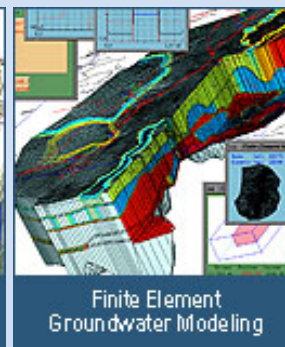
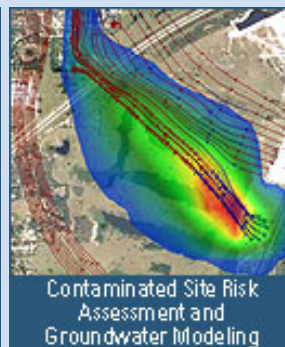
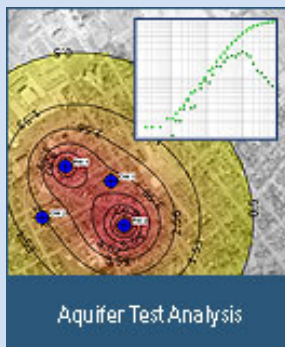
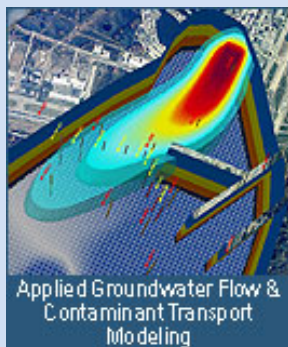
This 3-day hands-on course presents an introduction to the management and analysis of groundwater data and is ideally suited for any groundwater modeler wishing to develop a comprehensive understanding of data sources and model integration.

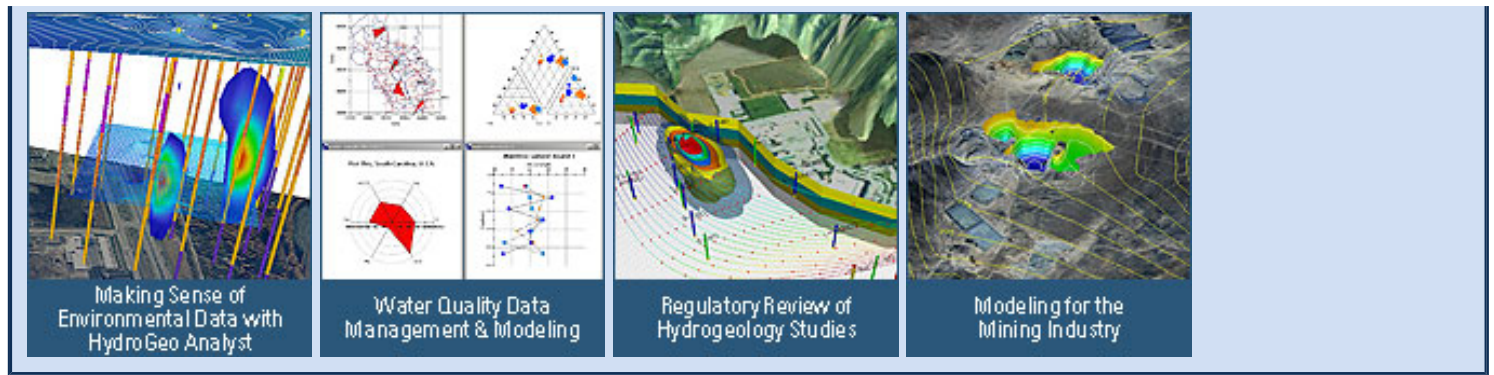


Course Details: [Visit our website for more details](#)

Registration: [Register online today!](#)

OTHER POPULAR COURSES OFFERED AROUND THE WORLD...





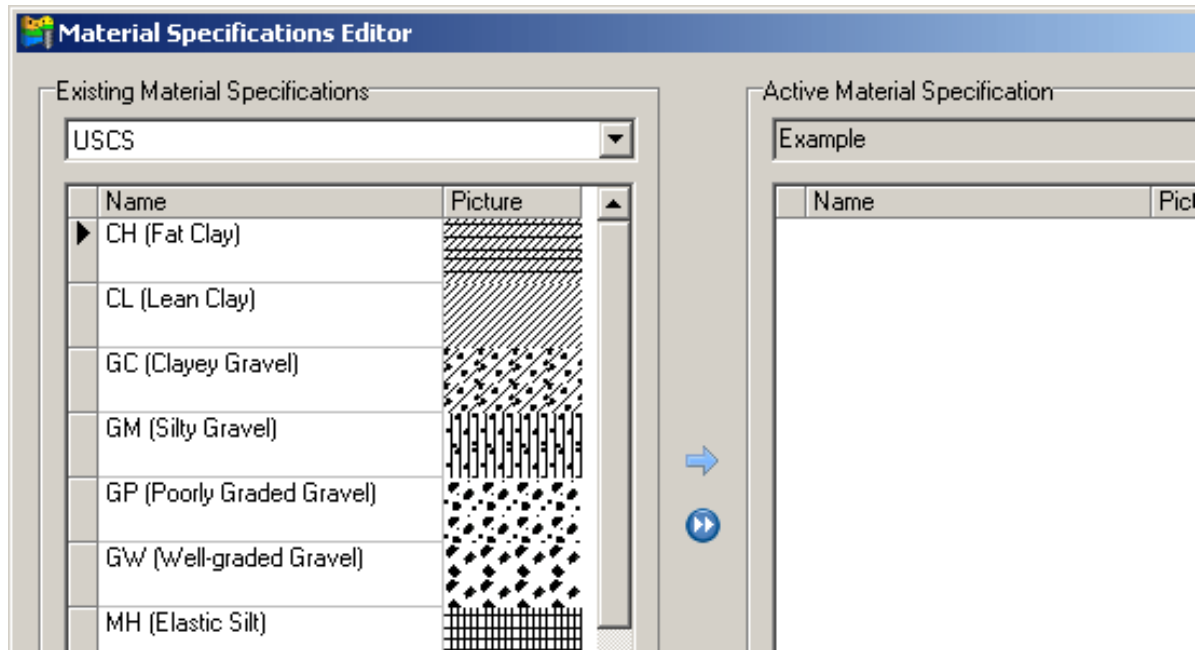
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Tips & Tricks

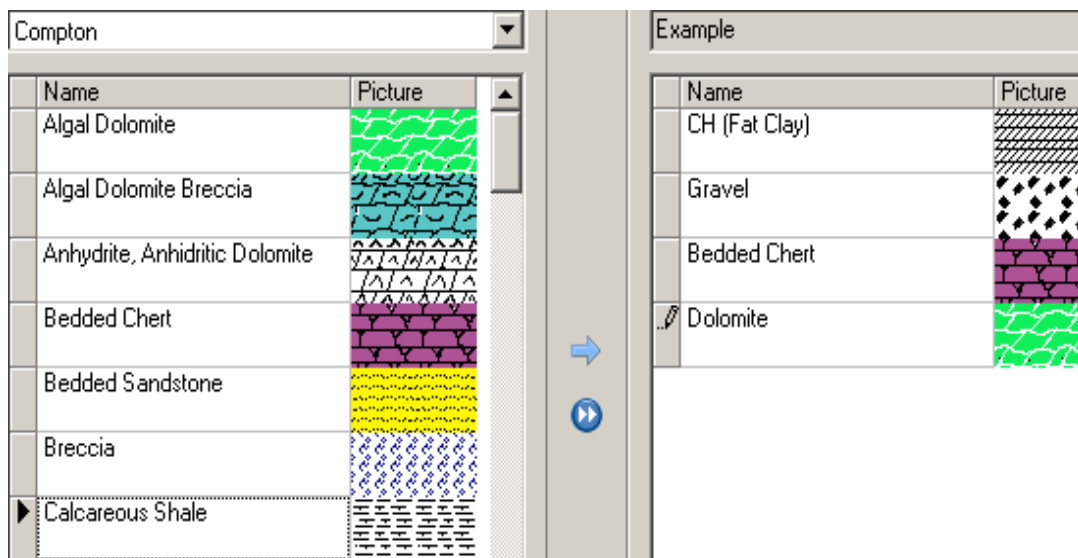
Adding a Custom Image to the Material Specifications Editor in HydroGeo Analyst

In HydroGeo Analyst v 3.0 it is possible to import your own custom images to be used in the Soil Classification. The Material Specification Editor provides options for editing material specifications, specifically creating and editing soil classifications for your project. This editor displays a list of standard soil specifications provided with HydroGeo Analyst and allows for the display of the soil type names and patterns for each of the classifications.

To create your own material specification, select Settings>Material Specifications or click on the icon in the toolbar. The Material Specification editor will appear and select the page icon to create a new Soil Classification System.

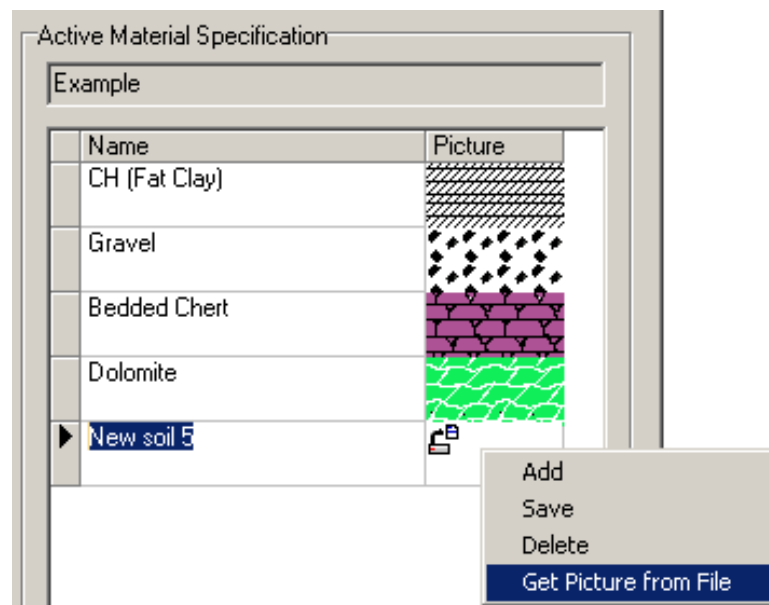


You may create the soil classification by adding existing soils to your list and editing the images and/or soil types to those appropriate for your project.

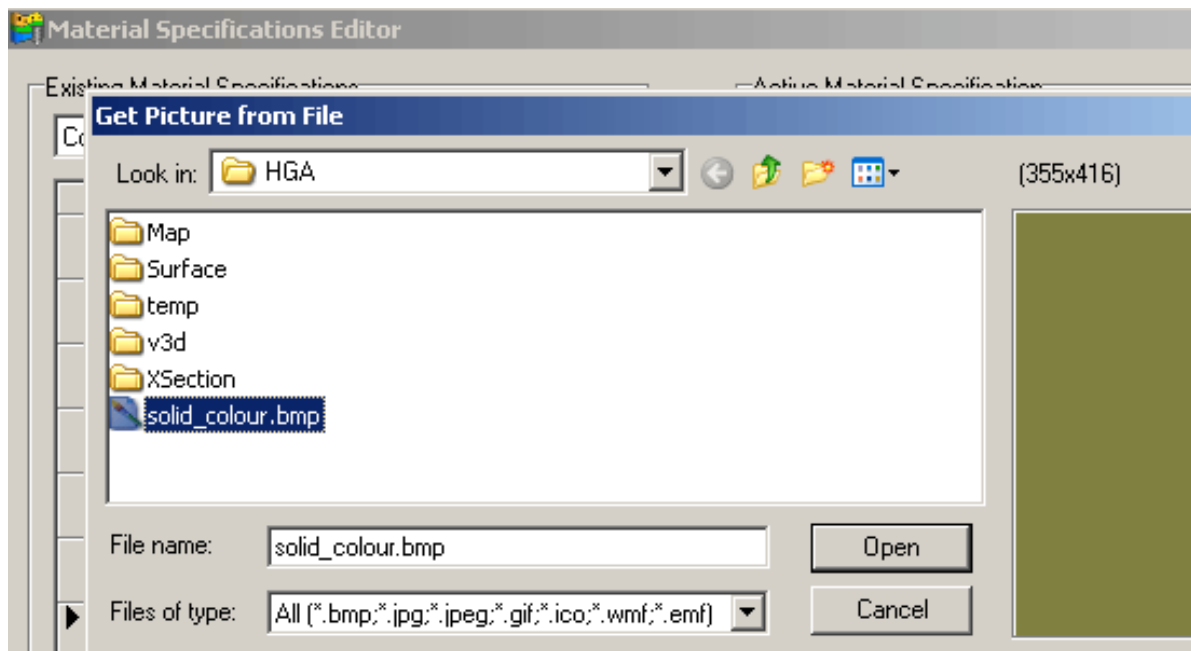


It is also possible to add your own custom images to your soil classification. You may find solid colours are easier to visualize differences in lithology in cross section. Solid colours or other images can be imported from .bmp, .jpg, .gif, .ico, .wmf, and .emf file types.

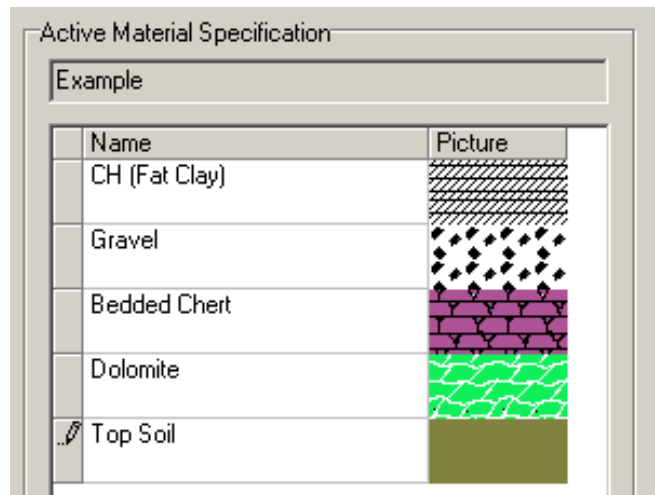
To import these images, add a new soil type to the soil classification using the '+' and right click over the picture.



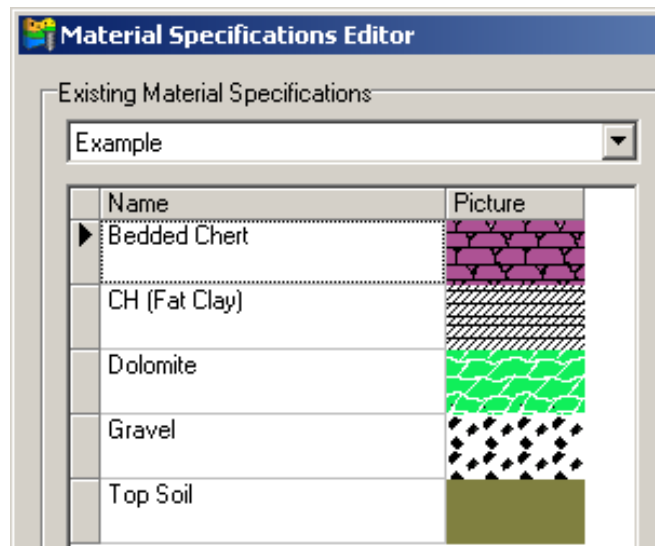
Browse to the image you wish to import.



The image will be imported into the soil classification. Edit the name to represent the soil type.



This soil classification can be saved and used in your project and in any future projects by selecting the 'Save As' icon and saving this soil classification.



For further information regarding the Material Specification Editor in HydroGeo Analyst, please visit the Visual FAQ on our [website](#)

For more information, please contact:

Phone: +1-519-746-1798

Email: sws-support@slb.com

Website: www.waterloohydrogeologic.com/support.htm

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Thank you for reading Water Solutions in Perspective.

For more information about Waterloo Hydrogeologic, please visit: www.waterloohydrogeologic.com



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2. After adding the "waterloohydrogeologic.com" domain, go to Tools > Options > Security tab > Download Pictures section > Change Automatic Download Settings button.
3. Select "Permit downloads in e-mail messages from senders and to recipients defined in the Safe Senders and Safe Recipients Lists used by the Junk E-mail filter."

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