

## News

Welcome to the Schlumberger Water Services new section, containing the latest news on groundwater software, instrumentation, training, and consulting.



[View Older archived News and E-newsletters \(2003, 2004, 2005, 2006, 2007\)](#)

### Recent Schlumberger Water Services News:



In November 2007 two of our senior software developers, Lucas Calmbach ([AquaChem](#)) & Serguei Chmakov ([Visual MODFLOW](#)) were presented with the prestigious Schlumberger Eureka Technical Career (SETC) Principal designation.



### Groundwater News In Perspective Winter 2008

#### Products & Technology

#### Fresh Water in the Desert: Potential for Four Billion Imperial Gallons revealed at ASR Site

Aquifer Storage & Recovery (ASR) provides substantially greater benefits over conventional surface water storage. From large underground storage capacity with high recovery rates to significant cost savings, ASR reduces reliance on vulnerable, costly, surface water reservoirs.

The initial phase of an ASR project (feasibility study) frequently requires the compilation of geological and hydrological information such as lithology, geophysical logs, water levels, water quality data, seismic data, and base maps. The data then is compiled, analyzed, and visualized using advanced groundwater software applications. Upon confirming the desired storage characteristics, a pilot field test is conducted with a typical duration of 12 months.

Whether obtaining and managing borehole data, conducting in-depth analysis of water quality, hydrologic properties and aquifer vulnerability, or visualizing vast amounts of data in three dimensions, the products to be selected for the ASR project must be carefully considered. Only a few products ensure accuracy and complete understanding of the data.

- [AquiferTest Pro](#)\* is used to determine the hydraulic properties of the aquifer. A major leap in pumping test analysis technology, AquiferTest Pro integrates derivative analysis capabilities, trends corrections, and data contouring resulting in accurate establishment of well and formation coefficients, well efficiency, aquifer hydraulic characteristics, transmissivity, and storability.
- [AquaChem's](#)\* analysis tools cover a wide range of functions and calculations used for analyzing, interpreting and comparing water quality data in the aquifer. From simple unit transformations, charge balances, statistics and sample mixing to more complex functions such as correlation matrices and geothermometer calculations, AquaChem analyses the potential for mineral dissolution and precipitation as the result of recharge or pumping. These powerful analytical capabilities, complemented by a comprehensive selection of commonly used plotting techniques, help accurately predict chemical characteristics of the aquifer after pumping.
- All data collected, including tests results, geological and hydrological information, lithology, geophysical logs, water levels, water quality data, seismic data, base maps, and raster images to name a few can be easily imported into [Hydro GeoAnalyst](#)\* (HGA). Delivering a powerful and dynamic multi-window environment, HGA provides the means for controlling and understanding an entire ASR project. From performing flexible multi-format data imports, and powerful search queries to creating detailed cross-sections, time-series, and borehole log plots, Hydro GeoAnalyst helps manage, analyze, and report the aquifer's complex data.
- [Diver](#)\* [Dataloggers](#) continuously monitor multiple parameters for pilot studies. Providing a reliable log of changes in response to hydraulic pumping tests or source water injection, the Divers provide reliable automatic measurement and registration of up to 24,000 measurements per parameter. This is essentially one measurement every ten minutes for six months. For each measurement, the Divers simultaneously and accurately register groundwater levels, groundwater temperature, and conductivity. The Divers are also easily compensated for changes in air pressure.

#### Schlumberger Water Services Product Philosophy

We believe products are the foundation to all our services and solutions. By developing easy-to-use products that address challenges and improve efficiencies during common project workflows, by linking instruments with software to optimize processes and deliver better results, and by introducing forward thinking features and products that become industry-standards, our unique technologies deliver results unobtainable by traditional methods.

Let us work with you. As part of your project team, we employ superior technologies to reduce uncertainty, minimize risk, and achieve cost-effective results. Call us at +519-746-1798 or e-mail us at [sws-info@slb.com](mailto:sws-info@slb.com).

[Click here to read the case study](#)

[Groundwater Software](#) | [Groundwater Instrumentation](#) | [Contact Us](#)

Consulting

## Innovative Systems for ARD Prevention and Management at The Kinross Haile Gold MineE

One of the key challenges facing mining companies during the closure and reclamation of mines is the prevention and management of acid rock drainage (ARD). Many mining properties contain sulfide-bearing materials that can produce ARD. The use of innovative engineering designs that include passive systems for prevention and long-term management of ARD is often a good option for closure.

[Click here to read the full story](#)

## Relieving the Pressure Core Concepts and Solutions in Open-Pit Water Control

Most active open-pit mines encounter groundwater sooner or later. The extent to which operations are impacted by groundwater can vary considerably. In most situations, a properly planned and managed program of water control will provide added value to a mine project and contribute to safe operating conditions. In some cases, dewatering and slope depressurisation is essential to mine implementation, providing for workable conditions, improved slope performance and considerable annual operational cost savings.

[Click here to read the full story](#)

[Groundwater Services](#) | [Contact Us](#)

### Events

## Conferences & Events

Schlumberger Water Services regularly reaches out to environmental and water professionals through sponsorship and participation at trade shows and conferences around the world. We select the most appropriate conferences to share our knowledge and expertise.

### Visit us at these upcoming events:

Event	Date	Location
<a href="#">Growth Management &amp; Environmental Permitting Short Course</a>	Feb 20-22	Daytona Beach, USA
<a href="#">SME Annual Meeting And Exhibit</a>	Feb 24-27	Salt Lake City, USA
<a href="#">PDAC 2008</a>	Mar 2-5	Toronto, Canada
<a href="#">WSTA - 8th Gulf Water Conference</a>	Mar 3-6	Manama, Bahrain
<a href="#">Water Down Under</a>	Apr 15-17	Adelaide, Australia
<a href="#">ExpoMin 2008</a>	Apr 15-18	Santiago, Chile
<a href="#">OWWA/OMWA Joint Conference &amp; Trade Show</a>	Apr 27-30	London, Canada
<a href="#">Florida Water Resource Conference</a>	May 2-6	Tampa Bay, USA
<a href="#">CIM 2008</a>	May 4-7	Edmonton, Canada
<a href="#">Canwell 2008</a>	May 14-17	Edmonton, Canada
<a href="#">WEF - 6th National Monitoring Conference</a>	May 18-22	Atlantic City, USA
<a href="#">MODFLOW and More 2008</a>	May 19-21	Golden, USA
<a href="#">Colorado Water Workshop</a>	May 21-23	Gunnison, USA
<a href="#">Water and Sanitation in International Development and Disaster Relief</a>	May 28-30	Edinburgh, UK

[Contact Us For More Information](#)

### Courses & Workshops

## Schlumberger Water Services Training Course Series and Workshops

The Schlumberger Water Services Training Services Division has been offering a range of educational courses for the past 17 years. Our courses have been designed to decrease the confusion typically associated with technical topics, and include hands-on learning using the world's most sophisticated software programs. Participants of our courses gain practical insight into a variety of environmental issues, and learn cost-effective techniques to achieve project objectives.

Upcoming SWS Training Courses & Workshops:

Merida, Mexico	March 3
Chihuahua, Mexico	March 5
Hermosillo, Mexico	March 7
Rio de Janeiro, Brazil	March 13
Tampa Bay, USA	March 17
Botswana, Gaborone	April 14
Musqat, Oman	May 7
<a href="#">Sacramento, USA</a>	May 20

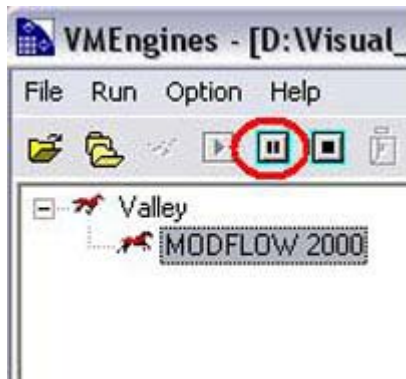
[SWS Training Course Series](#) | [Course Schedules](#) | [Contact Us](#)

## Tips & Tricks

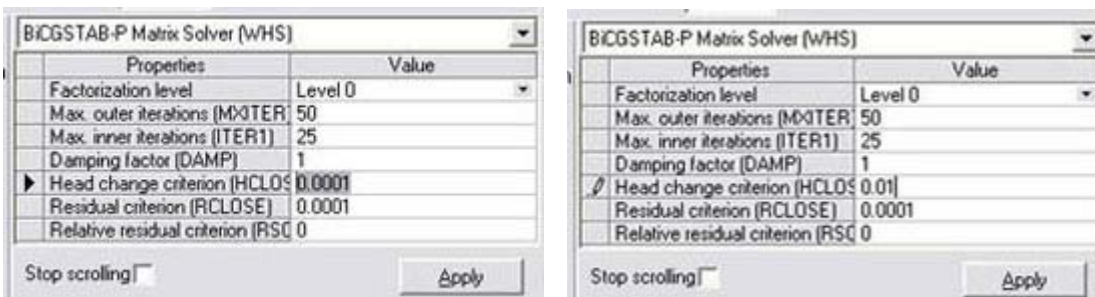
### Changing Solver Settings in Visual MODFLOW v4.2 During a Model Run

During a model run it may become necessary to change the settings for your solver. This may be necessary because the maximum number of iterations may be exceeded or you may need to adjust your head change criterion in order to result in a faster model convergence. This month's Tips'N'Tricks will show you how!

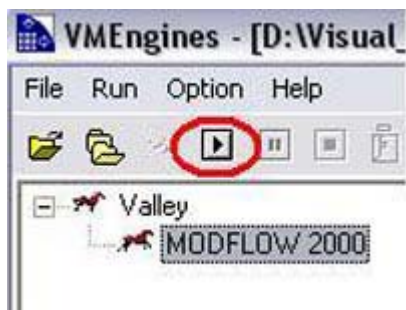
1. After selecting "Translate and Run" in the Visual MODFLOW Run Menu, the VMEngines window will appear showing the progress of your model run. Prior to adjusting any of your solver settings, first pause the run:



2. Once your model run has been paused it is possible to then change your solver settings by overwriting the values currently found in the "Values" box and then selecting "Apply":



3. When the desired changes have been made, simply select the "Resume Engines" button to continue your model run with your new settings. For additional information on solver settings please consult the Visual MODFLOW 4.2 manual, chapter 5.2.3 page 286.



[SWS Technical Support](#) | [Software FAQ's](#) | [Contact Us](#)

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## Older Archived News and SWS E-newsletters (PDF)

### Archived Schlumberger Water Services News

[Schlumberger Water Services Acquires Water Management Consultants](#)  
[Diver-NETZ Wireless Groundwater Monitoring Network Product Release](#)

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