

Focus-Information

Geotechnology ▼ Hydrogeology ▼ Monitoring ▼

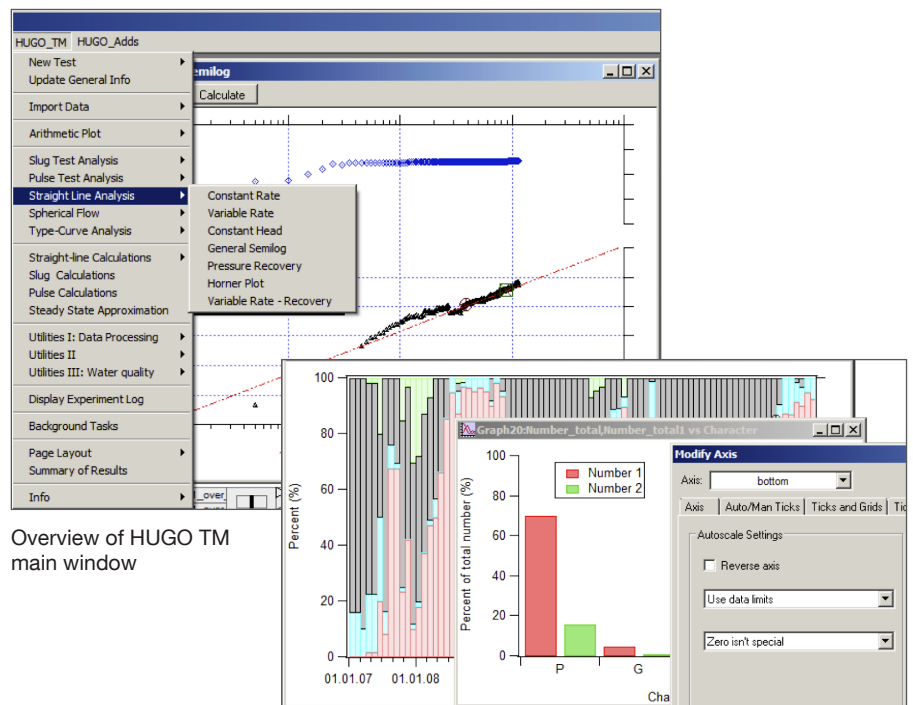
Hydrogeologie >> hydraulische Tests

HUGO TM – Analysis Software

Software for the Analysis and Presentation of Hydraulic Tests

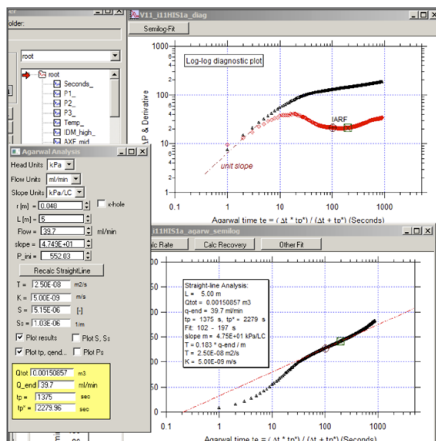
Applications

HUGO TM was specifically developed for the real time analysis of hydraulic tests during field work. The continuous control of the test progress is crucial to achieve the objectives of the test and to optimise the test duration. HUGO TM is implemented in the Software IGOR Pro and independent of the data acquisition system. Therefore the raw data are not affected by any changes. HUGO TM regularly imports the recorded data from the Solexperts GeoMonitor II data acquisition system providing our field engineers and clients with immediate results while the test is still in progress. HUGO TM includes a wide variety of hydraulic analysis procedures and numerous graph and diagram options and is therefore particularly suitable for detailed test analysis and reporting in the office.



Overview of HUGO TM main window

Graphing possibilities



Diagnostic and semilog plots with analysis window

HUGO TM features include

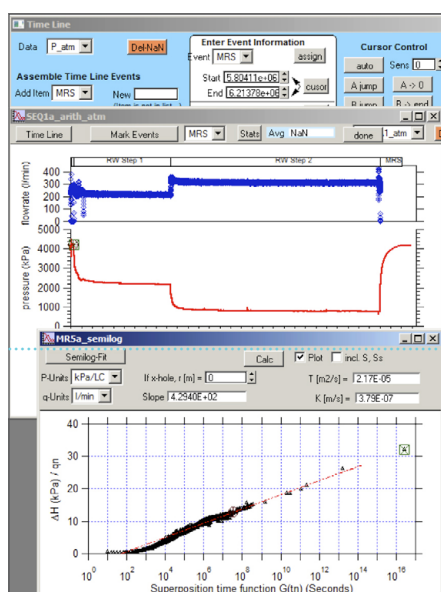
- real time data import during field testing
- fast and easy handling of analysis options
- automatic update of all graphs
- easy processing and preparation of test data
- constant rate / head test analysis
- variable rate test analysis
- recovery / build-up analysis
- diagnostic plots with pressure derivative
- slug / pulse test analysis
- numerous graph and diagram options
- graphs and layouts for reporting

Background

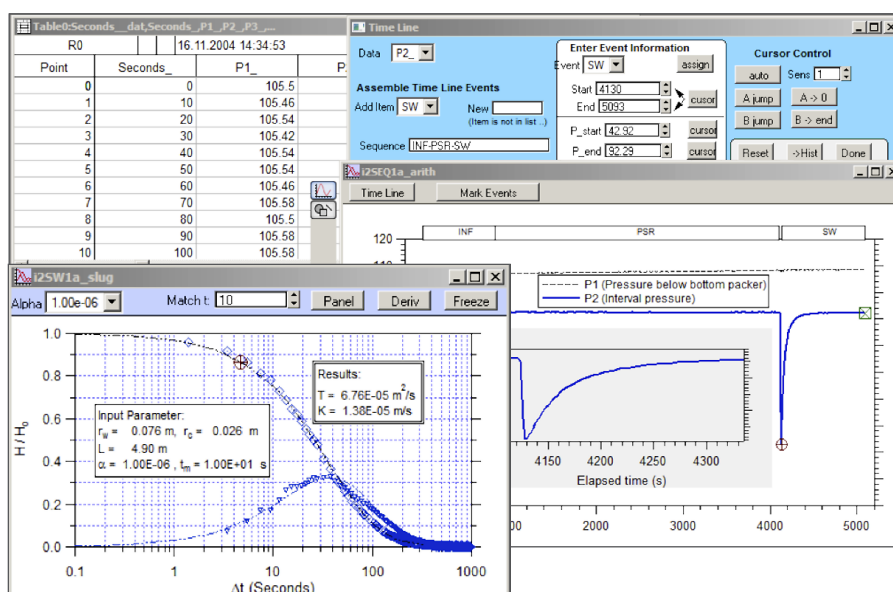
HUGO TM is a program that runs within the graphic software package IGOR Pro from WaveMetrics Inc., Lake Oswego, USA, which is a publication quality scientific and engineering graphics program. IGOR Pro supports the handling of large data sets and includes high-speed data display and generation of graphs. Many different types of graphs with a nearly unlimited number of data points, traces and axes can be created and adjusted to the requirements. IGOR Pro includes a wide range of capabilities

Specifications

- HUGO TM supports type-curve-matching and straight-line analysis methods
- The routines have been verified using a numerical borehole simulator
- User-friendly windows help to define the parameters for the import of the data and the subsequent analysis and presentation. All input parameters and results can be easily exported and used for documentation
- All analysis steps are documented in the built-in history log and can be traced back if necessary
- Graphs, tables and logbooks can be combined in user-defined layouts and exported for reporting and presentation
- HUGO TM was introduced 1998 and has been applied in numerous hydro-geological projects



Variable rate test analysis

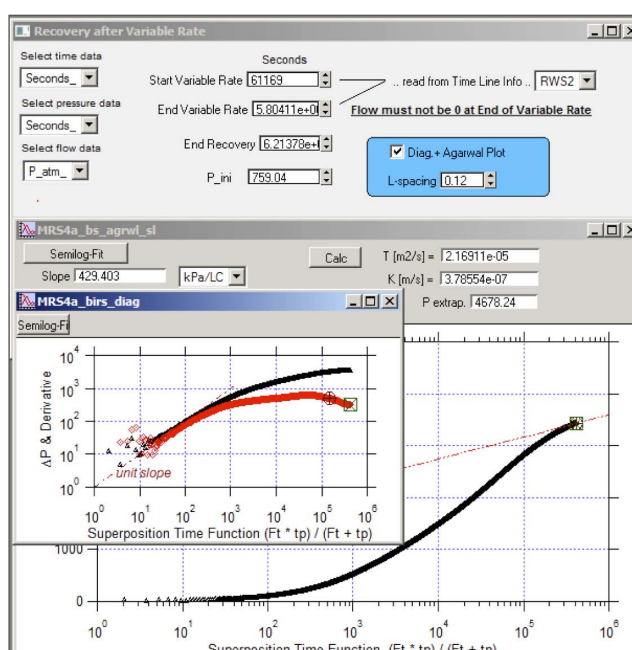


Analysis of slug test

for scientific and engineering analysis, e.g. for the processing of the test data and for statistical analysis. The built-in programming environment allows the flexible integration of specialised routines. Thus, client-specific routines can be run in IGOR Pro to make the analysis as fast as possible.

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Diagnostic and semilog plots with analysis window