ENDEEPER®

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PETROLEDGE® Suite

PETROLEDGE is an advanced software for capturing, codifying, storing, processing and sharing detailed petrographic descriptions of clastic and carbonate reservoir rocks, based on a high-level geological ontology. Using PETROLEDGE, the petrographic descriptions are organized and distributed simultaneously to different queries.
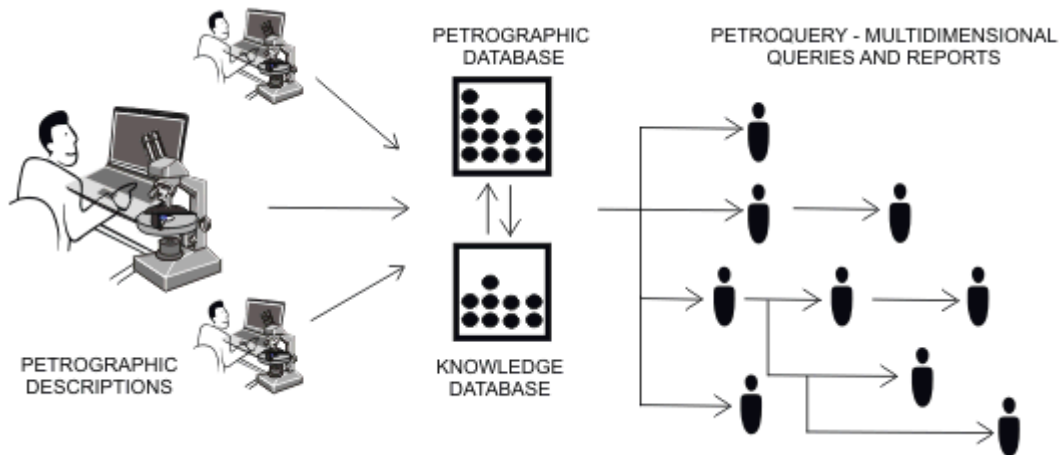
PETROLEDGE® characteristics:

- Petrographic information centralized in one software;
- Storage of detailed information and extensive documentation;
- Easy integration with other interpretation tools for the petroleum industry;
- Optimization and reduction of time spent in petrographic quantification;
- Automatic classification and diagenetic environments interpretation;
- Easy knowledge sharing;

Option 1 – PETROLEDGE® Workstation

Complete station for Petrographic description for a single user. The system stores its information in a local data base and provides modules for analysis and geological interpretation over the stored data.

Characteristics:

- Easy installation from CD or Internet;
- Centralized storage that allows easy backup;
- Organization and control of petrographic data without the need of a database management;
- Possibility of integration with STAGELEDGE (sold separately) to automate the quantification process;
- Multi-sample classification tool;
- On-line support.

This version offers:

- Data security by password protected access;
- The embedded database guarantees security in storage and management of a large number of descriptions;
- The samples are referenced to the oil field, stratigraphic unit, well depth and trajectory, allowing further correlation;
- Complete ontology of siliciclastic and carbonate rock petrography stored in a knowledge base that supports standard description in a very sophisticated and complex level of detail (according to the petrographer's needs), including textural and structural aspects of the rocks and constituents, allowing complete description of paragenetic relation, habit and modifier features that affect reservoir quality;
- Full interface for microscopic and macroscopic description of textural and structural aspects of the rock, including the support of visual tables;
- Full interface for description of constituents, habits, paragenetic relations and modifiers;
- Full interface for constituent quantification;
- A tool for image annotation, storage and management, which also supports the association between the objects in the image and the described features for documentation;
- Multi-sample classification tool for Folk and McBride compositional classification and Dickinson provenance diagrams, both actual and original, reconstructed from description of diagenetic modifications;
- Diagenetic environments interpretation for the sample;
- Classification of carbonate rocks according the Dunham, Embry & Klovan, Grabau, Brankamp & Powers;
- A single installation of PETROQUERY, a comprehensive tool for on-line multi-dimensional consultation of the stored data, exporting the results of consultation as new data tables;
- Exportation of full reports in several standards formats including PDF, XLS, HTML, Geocosm Touchstone® and XML;
- The user may choose to export textual reports both in Portuguese and in English, independently of the original Language version of the software.

The system is offered in English or Portuguese versions.

Option 2 – PETROLEDGE® Server

This version was conceived for a corporate environment, answering the requirements of knowledge management: fully information integration and sharing, security access control, safe storage and fault recovering, and capability for knowledge evolution. The system offers modules for analysis and geological interpretation and support for data exportation for 3D reservoir modeling system.

Characteristics:

- Centralized description content of rock samples;
- Possibility of information storage to assure data recovery during risk situations;
- Simultaneous multiconnection and data security;
- It allows the use of different databases;
- Multi-tasking for the same petrographic sample and division of tasks;
- Distribution of stored data to limited query workstations (PetroQuery tool);
- Different users manage samples independently;
- Independence of nomenclature with content management pre-determined to descriptions;
- Simultaneous Multi-sample classification;
- Possibility of integration with STAGELEDGE (sold separately) to automate the quantification process;

This package offers:

- Full integration of the corporate information through the relational database management system adopted by the company;
- Multi-user access of the information with four levels of user (manager, petrographer and system administrator). The authoring tool allows modification only by the petrographer responsible by the description;
- The fully integrated relational database system guarantees security storage and management, fault recovery, multi-user control access for consultation and modification, remote access, and huge capacity of storage;
- The samples are referenced to the oil field, stratigraphic unit, well depth and trajectory, allowing further correlation;
- Complete ontology of siliciclastic and carbonate rock petrography stored in a knowledge base that supports standard description in a very sophisticated and complex level of detail (according to the petrographer's needs), including textural and structural aspects of the rocks and constituents, allowing complete description of paragenetic relation, habit and modifier features that affect reservoir quality;
- Full interface for microscopic and macroscopic description of textural and structural aspects of the rock, including the support of visual tables;
- Full interface for description of constituents, habits, paragenetic relations and modifiers;
- Full interface for constituent quantification;
- A tool for annotation, storage and management of images, which also supports the association between the objects in the image and the described features for documentation;
- Multi-sample classification tool for Folk and McBride compositional classification and Dickinson provenance diagrams, both actual and original, reconstructed from description of diagenetic modifications;
- Diagenetic environments interpretation for the sample;
- Classification of carbonate rocks according the Dunham, Embry & Klovan, Grabau, Brankamp & Powers;
- PETROQUERY, allowing petrographers and managers to develop sophisticated multi-dimensional consultations of the whole data set;
- Descriptions of a reservoir, field or basin in a fully integrated way;
- Storage of consultations and resulting tables for further use;
- Exportation of full reports in several standards formats, including PDF, XLS, HTML, Geocosm Touchstone® and XML;
- The user can choose to export textual reports both in Portuguese and in English, independent of the original Language version of the software;

The system is offered in English or Portuguese version.

Option 3 – PETROLEDGE® Academic

This version provides all features of the Workstation version, but it does not support plug-ins. It is only available for educational institutions.

STAGELEDGE®

An automatic point counter fully integrated and controlled by a module in the PETROLEDGE, HARDLEDGE or COUNTERLEDGE. The stage is adaptable to almost all models of microscopes provided by the main manufactures.
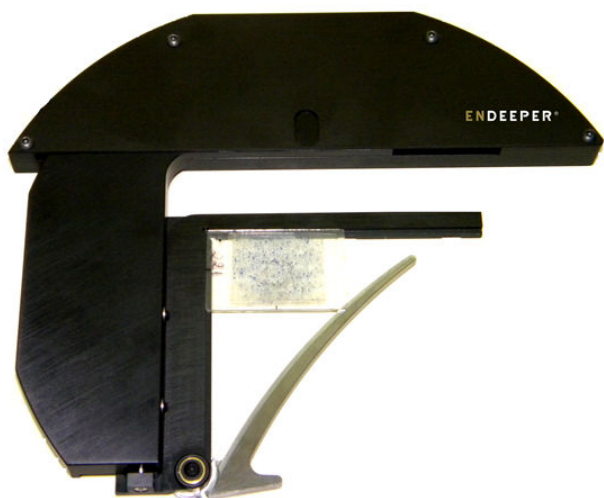
- The STAGELEDGE allows optimized quantitative petrography by high-precision movement control of the thin section, reducing time of quantification to 1/3 of the conventional;
- The stage is automatically moved after each step of counting;
- Joystick allows easy and fast scanning of the thin section;
- A compositional map for the quantification pathway is associated with the described constituents;
- Minimum step size for counting: 0.005 mm.
- Free movement in three speeds easily controlled both by joystick or keyboard.
- Easy USB connection.

Contact

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