Top-Down, Intelligent Reservoir Modeling

An Alternative to the Traditional Simulation and Modeling of Mature Fields

Building Reservoir Simulation Models Based on Historical Field Data

Intelligent Solutions, Inc.
www.IntelligentSolutionsInc.com
Does Your Field Include More Than 50 Wells? Has It Been Producing for More Than 5 Years?

TOP-DOWN MODELING is a completely new and innovative way of building and history matching reservoir models and forecasting production in mature field.

TOP-DOWN MODELING takes full advantage of historical production data and well logs in order to build a reservoir simulation model.

TOP-DOWN MODELING is an elegant integration of state of the art in Artificial Intelligence & Data Mining with solid reservoir engineering.

Minimum Data Requirement:
- Production History
- Well Locations
- Well Logs

Data that can be used to enhance the model:
- Pressure Data
- Core Analysis
- Well Test
- Seismic
**Key Advantages of TOP-DOWN Modeling**

**Short Development Time:**
Unlike traditional reservoir simulation models, development of top-down models is measured in days and weeks and not months and years.

**Data Requirement:**
Top-Down Modeling is a newly introduced, peer-reviewed, reservoir modeling technology that requires only production rate data to start the analysis. The model is fine-tuned as more data (logs, cores, pressure, seismic, operational constraints ...) is incorporated in the analysis.

**Analysis Complexity:**
Unlike traditional reservoir simulation, no specialized skills are required for the development and analysis of Top-Down model. Any petroleum engineer or geoscientist can build, understand and fully analyze a Top-Down model.

**Technology:**
An innovative integration of solid reservoir engineering techniques with state-of-the-art in Artificial intelligence and Data Mining (AI&DM).

**Deliverables:**
Production Forecasting, Field Development Strategies, Remaining Reserves, Optimum Infill Locations and a List of Underperformer Wells as prime candidates for workover are among the deliverables of Top-Down modeling.
Maintaining Excellence in the Art and Science of
Artificial Intelligence & Data Mining (AI&DM)
as Applied to the
Exploration & Production Industry