

JewelSuite Real-Time Reservoir application

Better, more informed operational decisions

Drill Better Wells

The **JewelSuite™ Real-Time Reservoir application** provides critical reservoir navigation data in real-time—creating an information-rich environment that facilitates quality operational decisions leading to better wells, earlier production, and increased recovery

Move Your Geosteering into 3D

Using the JewelSuite Real-Time Reservoir application, you can build a 3D pre-well reservoir model around a planned well to provide a base case. Then, while drilling, you can continuously update the subsurface model in real time with logging-while-drilling (LWD) data.

You will be able to generate—on-demand and within minutes—quantitative comparisons between the real-time and pre-well reservoir models to aid your reservoir navigation decisions.

For example, the software's Difference Volumetrics report provide a tabulated outline with graphical indicators of all the differences between the pre-well

and real-time model with geological consequences for the well. And, data from 3D seismic surveys and nearby vertical and horizontal wells can be used to update real-time subsurface models quickly and efficiently.

JewelSuite Applications

The JewelSuite Real-Time Reservoir application is just one piece of the portfolio of applications based on the **JewelEarth™ platform**. These applications deliver subsurface intelligence and insight for optimizing field development plans and driving greater production.

The JewelSuite Viewer

As part of the offering, Baker Hughes provides the JewelSuite Viewer application at no charge. This application enables comprehensive and flexible viewing of all JewelSuite models. The JewelSuite Viewer application can also be used to view models created by almost all other established subsurface modeling software packages.

Application

Real-time reservoir navigation services (RNS) and geosteering

Benefits

- Field-wide analysis of multi-well RNS results
- Superior 3D visualization while drilling
 - Subsurface models with real-time updates
- Real-time, quantitative volumetrics analysis
- Better, more-productive wells

Other JewelSuite Applications

- The **JewelSuite Reservoir Stimulation application** harnesses the power of **MFrac™ algorithms and workflows** with JewelSuite models for multizone hydraulic fracture design and analysis.
- The **JewelSuite Subsurface Modeling application** is designed for the most technically advanced reservoir models available to the oil and gas industry
- The **JewelSuite Geomechanics application** provides real-time geomechanical monitoring and advice concerning wellbore stability.
- The **JewelSuite Formation Testing application** delivers real-time, advanced analysis of reservoir pressure testing applications.

Baker Hughes workflow

Baker Hughes uses advanced directional drilling systems along with real-time formation evaluation technologies to achieve well-specific objectives, with maximum efficiency and excellent Health, Safety and Environmental (HSE) results. Multi-component inversion of advanced LWD measurements

provides you with 360° resistivity mapping for as many as six remote distance-to-bed boundary calculations in real time. The JewelSuite Real-Time Reservoir application updates the 2D and 3D subsurface models in real time with seamless data transfer from the acquisition system. Clear geospatial visualizations in 2D and 3D aid you in making the best geosteering decisions.

Use In-House or Leverage Our Expertise

The JewelSuite Real-Time Reservoir application can be purchased and used as a stand-alone, in-house software application or included as part of a Baker Hughes' reservoir navigation and geoscience engineers guide advanced geosteering bottomhole assemblies in geologically complex, high-angle, and horizontal wells. Using the JewelSuite Real-Time Reservoir application, the benefits of increased recovery and production rates in real time are visualized and quantified.

The result: better operational decisions and better wells with earlier, higher production, and increased hydrocarbon recovery.

