

CASE STUDY

+ Operator Streamlines, Unifies Data Management Using Avocet and OFM Software

Single production data center improves decision making and makes data readily available for reservoir and production analysis

CHALLENGE

Overcome inefficiencies of multiple formats and locations for production data from numerous fields and improve reporting and analysis.

SOLUTION

Create a unified model and central repository for production data with the Avocet* production operations software and perform surveillance using the OFM* well and reservoir analysis software.

RESULTS

Achieved uniformity of production data formats, which improved data quality, increased efficiency, and enhanced decision making.

REGION



INCONSISTENCY IN PRODUCTION DATA FORMATS HINDERS DECISION MAKING

Under a long standing partnership agreement the operator has been working with local partners to operate a number of onshore projects spread across Russia. These projects are typically characterized by complex operational challenges.

Within and among these assets, data management procedures were not clearly documented or universally understood. The production data from the assets were stored in various formats, including Microsoft Office files, PDF files, software application project files, and third-party databases. This made data preparation, transformation, and analysis tedious and time consuming. The lack of a central data analysis tool created performance problems and limited collaboration among multidisciplinary teams.

Facing a significant increase in the number of wells from planned new field development, the operator sought a solution to harmonize their production operations data flows to make timely and informed decisions for the assets.

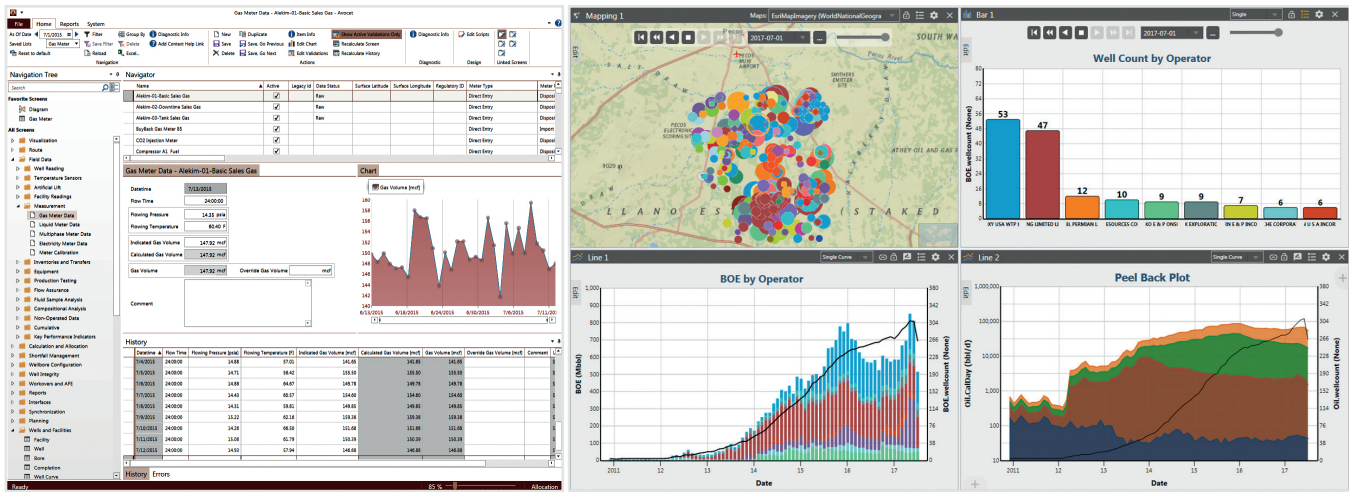
STANDARDIZE AND ANALYZE DATA WITH THE AVOCET AND OFM SOFTWARE

The Sensia solution combined the feature and benefits of Avocet production operations software with the OFM well and reservoir analysis software. The Avocet software production data management system (PDMS) delivers a robust architecture to acquire, store, manage, validate, allocate, and report production data. The OFM software provides day-to-day surveillance and analysis of fields and enables users to visualize and analyze production data for individual or multiple completions in one or more fields.

Citing the flexibility of the Avocet software and the expertise of the Sensia implementation team, the operator selected the Sensia solution following a pilot implementation that included site assessment, technical specification preparation, deployment and configuration, and end-user and administrator training. The operator needed access to quality current and historical production data from the three assets to support activity in such areas as surface facilities parameters and PVT laboratory analysis. Further work included the development of data loaders and back allocation customization. The OFM software was deployed to enable the operator to leverage the quality data of the PDMS in the Avocet software for production analysis, forecasting, and reserves estimation.



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Avocet dashboard

OFM analysis dashboard

The operators project comprised data migration of over 20 years of historical records, development of data loaders, back allocation customization in accordance with client analysis, forecasting, and reserves estimation.

CENTRAL DATA REPOSITORY IMPROVES EFFICIENCY AND ACCELERATES DECISIONS

With the Avocet software, the operator was able to streamline and automate numerous data flows for the data sent in daily by different partners in various formats from more than 250 producing wells in the three assets.

The central data repository provided by the Avocet software serves as a single version of the truth for all of the production data. For the operator, the unified management supports data collection, aggregation, validation, and storage; production computations and reporting; key performance indicators

calculations; integration with corporate enterprise resource, accounting, and business intelligence systems; and integration with engineering tools such as the OFM software. Moreover, the OFM software is integrated with Schlumberger's Petrel E&P platform, creating a seamless data flow from the production database to geological and reservoir models.

Having a central data repository increased the efficiency of production monitoring, analysis, and forecasting. Users reported significant time savings in accessing production data, and the time needed for processing and quality control of daily and monthly production data from the three assets was reduced from several days to a few hours. The increased quality, consistency, and completeness of the data in the corporate production data center enhances the effectiveness and speed of decisions related to production and field development.