Enhancing the Analysis of Well-Log through Digitization

Introduction

The client is a multinational oil and gas product company and has the industry's largest collection of online well data in areas within North America, South America, Europe, Russia, and Africa.

Need

Our client requires a digitizing tool that converts well-log documents into workable datasets for easy interpretation and analysis, and also provides tracking of well logs and provides output data in industry-standard formats (LIS, LAS, etc. overall an application can help in the efficient analysis of scanned documents with crucial oil well-related information in them. The system should also be able to trace log files automatically

Industry

Oil and Gas

Solution

Contata deeply studies the requirement and created a desktop application that automates document analysis and classification. Scanned well logs are digitized and enriched with indexes and keywords to provide enhanced search capabilities on the metadata. The system uses complex algorithms to track curves on scanned images and is capable of representing data in the form of reports and charts. The service stack provided comprises of:

- Development
- QA testing
- Maintenance and support

The application digitizes well logs into workable datasets for analysis by geologists, thereby improving productivity and reducing manual efforts by 60-70%.

Our Services

Upstream Service

Technology Stack

WPF Proprietary DB

DevExpress WCF C#

Advantages

- Optimizing data analysis with accurate digital raster log.
- Global availability of data in real-time.

- Quality control and accuracy using Grid detection, calibration, and curve data vectorization techniques.
- Export digitized data in LAS, LIS, ASCII, or BIT format.