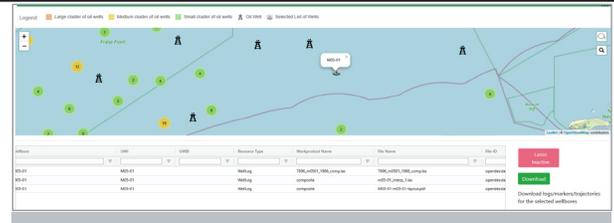




Emerson Geolog Connector to OSDU Helps TotalEnergies Accelerate Decision-making and Project Delivery

RESULTS

- The Geolog connector to OSDU TotalEnergies data platform provides fast access to a standard unified and shared data environment.
- Recognized by TotalEnergies as a fit-for-purpose solution that meets user expectations.
- Removes subsurface data exchange silos between drilling geosciences and development, for improved collaboration.



▲ The Geolog WebApp allows users to connect to the OSDU instance and quickly search and access interpreted well data and associated documents

APPLICATIONS

Emerson Geolog™ Connector to OSDU

CUSTOMER

TotalEnergies

CHALLENGE

One of the key challenges in accelerating decision-making and reducing the development cycle of any operational E&P prospect is to reduce the time needed to make information and data available across the various disciplines and business entities involved. To address this challenge, a single standardized shared data platform is required, and the applications used by different parties (e.g. drilling, geoscience, etc.) need to provide seamless access to this platform in order to both access existing data and publish new data such as the results of interpretation.

At the end of 2020, TotalEnergies decided to demonstrate the capabilities of the OSDU open-source data platform on an Azure cloud instance, and began an ambitious Suriname use case project with an eight-month duration.

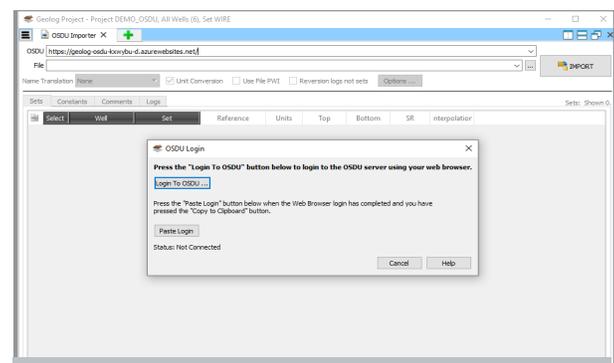
The main goals of this project were first to demonstrate how OSDU could improve collaboration by reducing internal business silos between drilling, geoscience and development business units, and secondly, to help accelerate exploration or appraisal well definition by seamlessly sharing the same updated data with all parties involved in the project lifecycle.

SOLUTION

For the Operational Wells Team in TotalEnergies, there was a strong need to have the Geolog application be capable of connecting to the company’s OSDU instance in order to be able to exchange well data. A Geolog-OSDU connector was a key component of the overall Suriname Use Case OSDU Data Platform project.

“Collaboration between Emerson and TotalEnergies was very fruitful. It helped to further solidify our relationship and opened a path to additional developments around the OSDU Data Platform. Thanks to the Emerson team for its innovative spirit, professionalism and strong commitment!”

Tatiana Akimova
Data Platform Lead, OSDU Team, TotalEnergies



▲ The Geolog-OSDU connector allows users to connect directly to the OSDU instance, and search and access available well data which can be imported into local Geolog projects, making them ready for the petrophysicists.

The Geolog-OSDU Connector was built by the Emerson team in close collaboration with TotalEnergies throughout the project.

RESULTS

End-to-end tests in TotalEnergies development and qualification environments were performed in July/August 2021 together with Emerson and TotalEnergies end users. The feedback from users after the testing phase was very positive and the connector was recognized by TotalEnergies as a fit-for-purpose solution that met the expectations of the final users.

- Petrophysicists were able to connect to OSDU from the Geolog 20 desktop application.
- The connector enabled users to collect well data from the OSDU Data Platform and load them into the local Geolog project.
- The connector enabled users to send interpreted well data results back to the OSDU Data Platform and make them available to all other discipline specialists involved in the project.
- The WebApp allowed users to graphically search the well data (well logs, well markers, well trajectories) and associated PDF documents and directly download them. This allowed the users to perform a quick check on data available on the data platform.

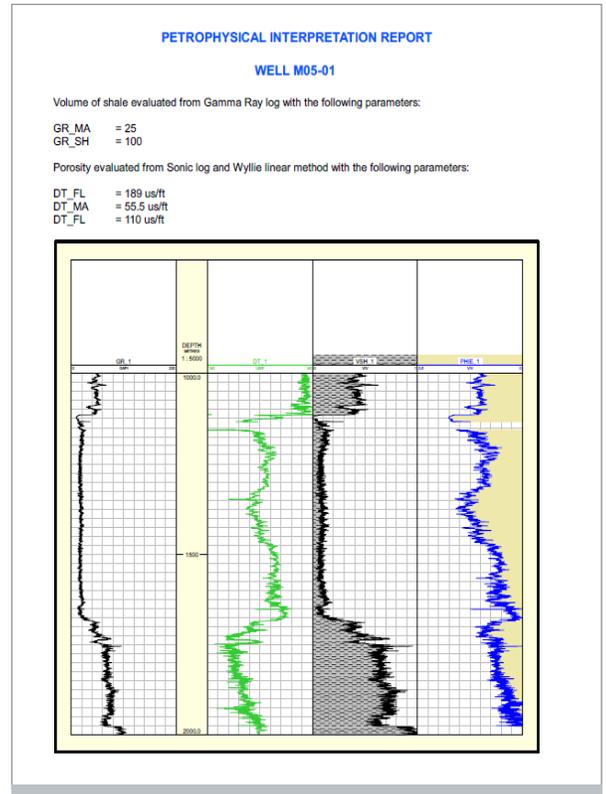
BENEFITS

The Suriname use case is the very first use case around TotalEnergies’ internal Subsurface Data Platform, which is allowing the company to build the foundations of its new Data Platform through alignment with the OSDU ecosystem. This is a major change for the management of geosciences data within the company, for the applications that consume this data, and for their use within TotalEnergies.

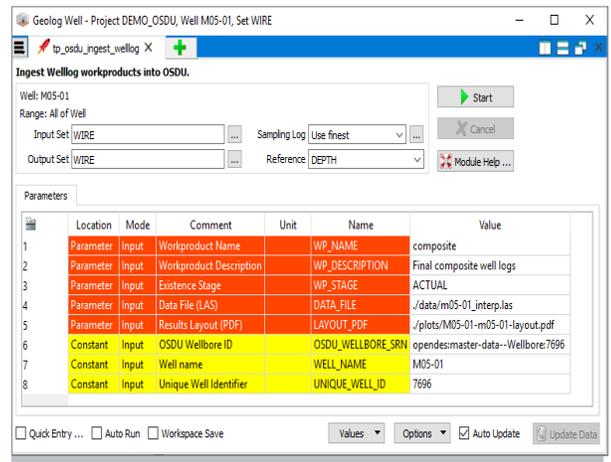
Building and testing the Geolog-OSDU System of Records connector with the Emerson team was an extremely rich collaborative experience.

Major benefits of the built connector:

- Full integration of the advanced Geolog petrophysics package into the geoscience processing chain
- Removal of subsurface data exchange silos between drilling geosciences and development, for improved collaboration
- Standardization of .las2 files sent from Geolog to OSDU thanks to common OSDU schemas
- Acceleration of data availability in Geolog due to connection to the Data Platform



▲ A Geolog-generated PDF report of the petrophysicist’s results



▲ The Geolog ingestion program allows users to send interpreted results and associated documents back to the OSDU instance.

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