

The Client

NuVista is an oil and natural gas company actively engaged in the exploration for, and the development and production of, oil and natural gas reserves in the Western Canadian Sedimentary Basin. NuVista's focus is on the scalable and repeatable condensate rich Montney formation in the Alberta Deep Basin.



NuVista - \$ 137.5M - IN OPERATING EXPENSES (2020)



The Application

#1 Well Life-Cycle Solution for Regulatory and Compliance

TORC (Total Operation Risk and Control) provides a business process and wide range of field data gathering tasks and reporting, for the most advanced well operations data management, regulatory control and compliance. TORC enables the operator to effectively track the status of a well from drilling to abandonment and reclamation.

Executive Summary

With a modern, cloud based software such as TORC, critical business decisions can be made with confidence. NuVista looked at the challenges with their current reporting in Excel, and realized all the benefits of TORC.

TORC provides acquisition of government data, while integrating with Wellman NextGen to acquire field data, providing the best solutions for optimal data collection, risk and control. As a primary data source it provides one platform to view all activities, files and project status.

The Problem

With the industry moving to a technologically advanced and digital era, it is essential to embed business processes into our workflow to move daily structure and operations of tasks to a more digitally enhanced environment.

This case study focuses on NuVista's challenges:

1. Managing old legacy wells; some wells have been in operation for over 50-80 years and therefore need to be managed, or abandoned. Obtaining files of that nature is usually tricky.
 2. Tracking of abandonment work is a hassle, and this creates miscommunication between departments (such as suspension and completion teams).
 3. Identifying the high risk abandonments and which to abandon first.
 4. Difficulty sending field reports to internal departments.
 5. Manual submission of data to AER and other regulatory bodies.
 6. Using spreadsheets. Excel formulas, calculations and macros can become corrupt.
 7. Difficulty in tracking deadlines.
 8. Accessibility of data and information.
 9. Different sources of information located in different places.
 10. Spending time to build and manage spreadsheets.
- Providing solutions to these challenges will help to drive massive cost and time savings to NuVista and the oil and gas industry at large.

The Solution

What is the right solution?

Simple. Using a regulatory and compliance well data management database system such as TORC removes all the aforementioned problems traditionally associated with spreadsheets.



TORC allows you to collect data from the field in real-time obtained from Wellman NextGen and enables your office team to have access as if they were on the wellsite themselves. Furthermore, its data access enables the user to create and work on existing tasks throughout the well life-cycle. This data is stored in an enterprise level database that allows you to create activities with a click of a button.



As a web and cloud-based (SaaS) solution, the entire well life-cycle operation can retrieve relevant data from any device wherever they have an internet connection. The ability to make important decisions can be done with confidence since the data is accurate, valid and you know you are looking at the most current information.

With historical data stored in the TORC application, you can easily perform a deeper analysis of well operations and activities over a greater length of time so that you can track work that is urgent, can wait or is overdue. Analyzing historical well data with current wells can help identify operational inefficiencies and enable optimization of a well site. This analysis is easily accessible within TORC, enabling the management team to make adjustments as necessary, thus saving time and money. You can also leverage and integrate other enterprise data analytics and BI solutions to gain deeper insight into your operations.

“

With TORC, we will be able to gradually speed up the work flow and interaction within departments and service companies.

Vicky Bayford - Operations Consultant - NuVista Energy Ltd

”

Benefits

The TORC environment monitors and controls all the in-field work activities during the well life cycle. From drilling to completion and land reclamation, suspension, surface casing vent flow to abandonment and reclamation.

Some of the benefits NuVista alluded to includes:

1. Providing up-to-date and accurate data regarding wells, while guiding the user on what to do next.
2. Provides a reminder on tasks which need to be done with adequate deadlines.
3. Effective communication within departments.
4. A one-stop tool for data management and storing of files.
5. Mobile access easy for field personnel to use and navigate.
6. Field operations and service companies can report files.
7. Data generation to enable submission to the regulatory body.

Other benefits of TORC include:

Operations, System Integration and Savings

- Cost and time savings by having a comprehensive tracking system that reports all levels of work history.
- Integration with WMNG to access field data.
- Easily manage your 'Non-Op' information by having all records in one place.
- Standardization of the workflow process.
- Minimizing errors through reduction of manual processes.

Reporting

- Creates standard reporting structure in the forms of PDF, XML, and CSV which can be stored for historical purposes and also be submitted to the regulator.
- Improves decision-making by getting the data into the hands of those who can take management action.
- Increase profit and growth by eliminating errors with fewer data entry points resulting in increased efficiency and time saving.
- Improved corporate accountability, minimizing the risk of fiscal and directorship liability, while increasing the management Board's confidence in operations.

Advantages of TORC

COMPREHENSIVE WELL INFORMATION MANAGEMENT MADE SIMPLE

TORC is a user-friendly application. It empowers staff to collect, analyze, monitor and report information, while drastically reducing your costs of implementation and IT support.

Some of the advantages of using TORC include:

1. Technology

TORC is based on leading database and application development technology supporting, SQL Server Express, SQL Server and Oracle databases.

2. Performance Driven Data Analysis

Monitor performance based data you have recorded in your wells using a rich calculation engine that provides clear and measurable KPIs. Multi well and offset analysis, management reporting, time-based analysis, as well as lessons and problems all add value to your data. Query, report, analyze—you have the power to use the data as you need!

3. Open Comprehensive Data Model and Database with built-in Validations

Enter the data once, and use it often!

TORC is a recognized leader in well information data models with a comprehensive well information and operations database from drilling to abandonment. The data is normalized, meaning that there is only one spot for each discrete piece of data. This one-stop data model allows you to query and report consistently, greatly easing the burden of data entry. Its built-in validations also ensure that the right data according to regulatory standard is entered.

4. Report Generation

Fast, accurate and hassle-free reporting drastically reduces the time necessary to pull and report critical data for submission.

Make use of printed versions, PDF files or email to distribute single or batch reports.

5. Scalability

TORC is built as a scalable system. Enabling over 300,000 wells in their system. It tracks operated and non-operated assets in the database. Management is simple and intuitive, no matter how large or small your operations may be.

6. Electronic Well File

TORC is a true electronic well file system with a comprehensive data model and file attachments. You can attach Excel, PDF, Word and image files to the well file and store them within the database for easy collaboration, organization and recall. Attachments give companies an easy way to manage all documents while reducing the dependency on paper files.

7. Mobile Capability

TORC includes fully-mobile functionality while providing a powerful yet flexible field data transfer system. It provides a two-way exchange of data from the field and office which in turn reduces field data problems and reliance on IT support.

8. Security

TORC includes a full DBMS security model, which crucially protects the data at the database level. Your vital data remains secure at all times.

“TORC is currently the only software that provides adequate well life-cycle regulatory and compliance.”