



CASE STUDY

How ARC Resources Ltd. Achieves Cost-Effective Field Planning with SeisWare's Field Development Software

AT A GLANCE

A GLOBAL LEADER IN RESPONSIBLE ENERGY DEVELOPMENT

ARC holds the largest responsibly produced and certified production base in Canada. With a focus on low-cost operations and leading ESG performance, an efficient and effective solution for field planning and geoscience characterization is an important part of the Company's development success.

COLLABORATIVE PARTNERSHIP INSPIRES GROWTH

ARC began using SeisWare's Geophysics program in 2007 and most recently expanded to use SeisWare's Field Development Tool.

A PLATFORM DESIGNED FOR FUTURE-FOCUSED PRODUCERS

Using SeisWare's Field Development Tool has allowed ARC to go beyond visual design steps to a comprehensive field planning solution for long-range development plans.

PURPOSE-DRIVEN AND INSPIRED ENERGY LEADER

Founded in 1996, [ARC Resources Ltd.](#) is a Canadian energy company with a strong operational, financial, and ESG performance track record. The company is focused on the responsible development of Canada's natural gas, liquids-rich gas, and crude oil resources.

ARC's primarily Montney-focused operations are located in Alberta and northeast British Columbia, where the company holds more than one million net acres of this world-class asset.

A NEED FOR COST-EFFICIENT WELL PLANNING AND ANALYTICS

ARC's large land area creates a need for integrated planning to lay out the company's full-field development.

In these plans, ARC must be able to visualize how to develop its land and create and compare different scenarios to ensure the company can optimize efficiencies and deliver improved resource recovery.

Having an accurate, dependable solution for field development, enables ARC to optimize opportunities for long-term field development.

At the time, the most common approach to well planning was a manual process of drawing well sticks on a map, creating a 2D visual that doesn't connect to subsurface data.

"Our previous approach hindered efficiency and effectiveness," says Nakamoto. "Other existing tools allowed users to build a single pad or look at a specific well, but none allowed us to look at what was possible from a comprehensive field development standpoint."



RICK NAKAMOTO
Chief Geophysicist,
ARC Resources Ltd.

Rick Nakamoto is the chief geophysicist for ARC Resources Ltd. He is responsible for technical oversight of ARC's geophysical applications and for creating consistent geophysics processes and workflows, ensuring ARC staff have the tools they need to achieve technical excellence.

“SEISWARE IS A VALUABLE TOOL IN COMPLETING OUR WORK EFFICIENTLY AND EFFECTIVELY AND HAS BECOME A PART OF OUR DAILY WORKFLOWS.”



AN INTUITIVE AND ACCURATE FIELD DEVELOPMENT TOOL

ARC needed an effective solution that would allow for an integrated approach to long-range field development; one that would connect geosciences with field development in one platform for analysis. The solution also had to provide insights into the potential reserves that different development scenarios could produce.

The ARC team was already using SeisWare's Geophysics software and realized SeisWare could be the solution to more efficient and cost-effective field development.

“We needed to do large-scale planning of the development of our resources,” says Nakamoto. “We weren't just interested in a well planner – we wanted a field planning solution.”

ARC tasked SeisWare with designing a tool for complete field development. SeisWare's ease of use and nimble approach allowed for a precisely designed tool that would meet ARC's needs for field planning.

SAVING TIME, IMPROVING COMMUNICATION, AND OPTIMIZING RESULTS

Today, SeisWare provides ARC with a cost-efficient well planning solution. With integrated programs and transferable data, ARC can effectively develop long-range models that allow for streamlined scenario testing and enable field development in a digital format.

With this approach, ARC can then use the data for other types of analyses to improve decision-making and outcomes.

SeisWare's easy-to-use interface allows ARC to build field development plans in 3D, saving time and ensuring the best tools and technical processes are used for field planning.

The statistics pulled from the Field Development Tool can be used to estimate drilling costs, how much lateral length might be achieved, as well as more accurate optimization predictions.

“Working in a digital space allows us to create statistics from what our plan represents, then push those plans into other tools,” says Nakamoto. “From that 3D space, we're also able to move to reviewing subsurface models and geological and engineering attributes.”

SeisWare enables ARC to move from field development to field analytics with an integrated program combining its Field Development tool with Geophysics. For ARC, the tool provides analytics that can then be used to determine both strategic and predictive sides of field planning. It has also improved strategic communications between team members for plans in development or being updated.

“Our goal is to leverage data to its maximum capacity to be able to look at it from a more integrated lens and to create processes and workflows that allow us to make better and more efficient decisions,” says Nakamoto.

Collaborating with SeisWare's support team has allowed ARC to seamlessly integrate the applications into the company's daily workflows.

A FUTURE FOCUSED ON GROWTH AND CONTINUED COLLABORATION

ARC is optimistic about continuing to use SeisWare's Field Development Tool integrated with the Geophysics program and what it enables its team to accomplish.

“Having all our data exist within a digital environment means it's no longer static pieces of information,” says Nakamoto. “It's something that can be integrated into other processes, analyses, and is important in being able to drive efficient and transparent decisions.”

Future planning is critical for energy producers focused on long-term vision and requires a solution that allows for data integration across all aspects of field development. The data must be available to geoscience, engineering, production, operations, and drilling for a multi-layered process that ultimately drives better decisions and outcomes in the long term.

CONTACT INFO@SEISWARE.COM FOR MORE INFORMATION