

Coring Services

QuickCapture™ Pro and QuickCore™

Reservoir Group's advanced coring systems delivered in a complex unconventional exploration well in Algeria.

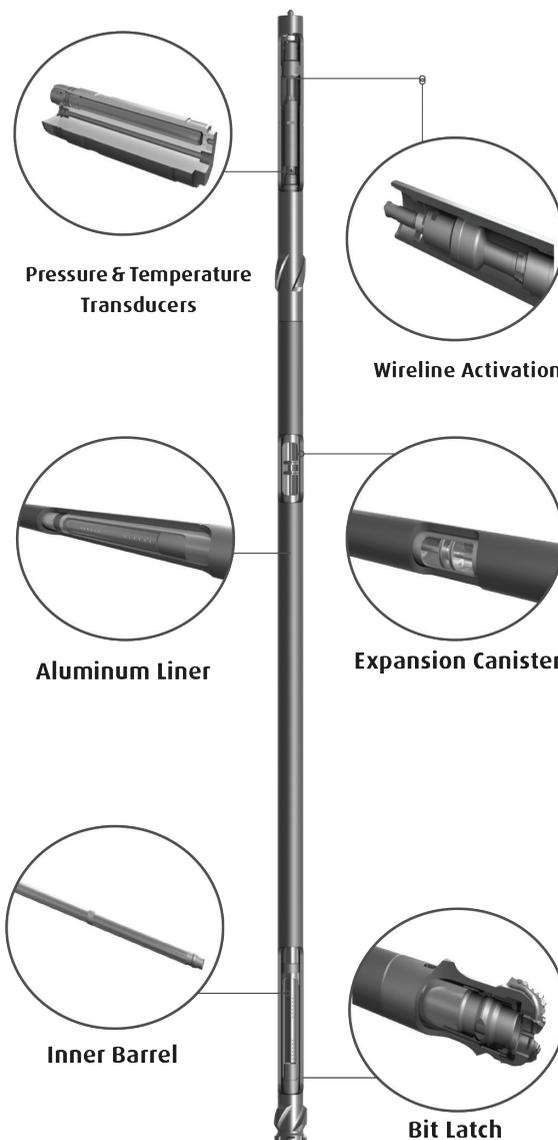
Customer Challenge:

A client needed to acquire both conventional cores and pressure cores while capturing accurate gas content in a formation with known drilling challenges. Challenges included losses in a known formation, suck pipe, and higher than normal mud weights. The target formation was an unconventional reservoir with little information to date regarding gas content or reservoir properties. Reservoir conditions were more than 6,000 psi BHP with an average depth of 3,900 meters.

Reservoir Group Solution:

The coring interval was through a complex formation that provided drilling challenges due to formation losses, differential sticking and wellbore stability. Throughout the coring program, Reservoir Group mediated these issues as well as increase average ROP compared to previous coring attempts.

Our coring experts deployed the QuickCapture™ Pro pressure coring solution, enabling both pressurized coring and conventional wireline coring without having to trip to surface.



The Results:

Reservoir Group's advanced coring systems were able to provide total collection of all in-situ liquids and gases by measure Q1 and Q2 gas content volumes – reducing error often associated with lost gas calculations.

Our experts recommended QuickCore™ wireline platform, enabling the client to cut five 18m conventional cores and two pressurized cores within a period of five days -- reducing rig time as well as providing 100% recovery. Both pressure core runs were activated successfully via wireline and brought to surface under pressure. **The program resulting in success – coring ROP averaged 10m / hr, no jamming, milling, or lost core throughout the job.**

We provided the client with both conventional and pressurized cores to compare the results of conventional desorption analysis to that of the QuickCapture™ pressure core. The data collected from the QuickCapture pressure cores and the desorption data from the conventional cores were directly compared. The results showed the **client measured four to five times more total gas than using desorption.**

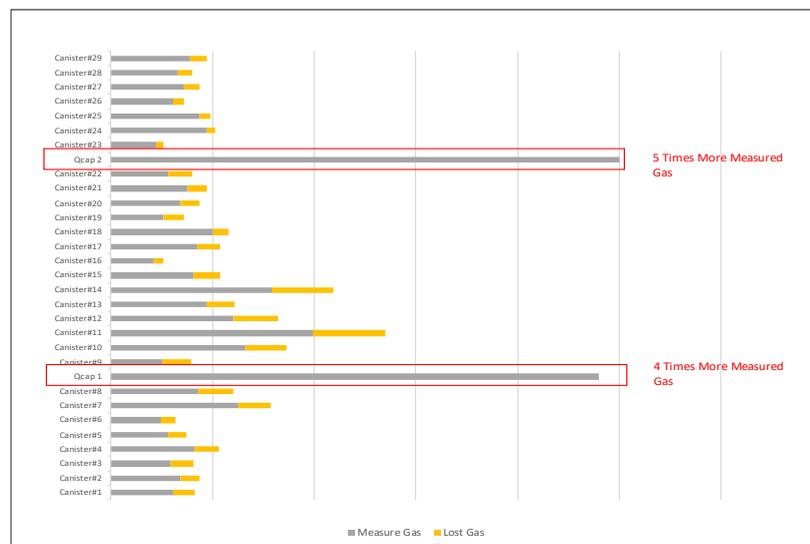


Fig. 1: The graph shows the total amount of gas from the two methods and the actual gas content figures.

Being able to directly capture and measure in-situ fluids, the client was able to accurately determine reserves. Based on further lab analysis and data interpretation, conventional analytical results could have underestimated reserves by as much as 60%. By eliminating the lost gas calculation from the analysis, reserves can be more accurately estimated by adding the ability to sample gas composition samples in the Q1, lost gas phase.

