



CSPG ROCK ANALYSIS WORKSHOP

March 21-22, 2019 | University of Calgary & AER Core Research Centre

The Virtual Core Table: a new way to discuss rock with exploration and production teams

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The standard way to view core in Calgary is to call the AER Core Research Center or your local warehouse, check the core is available to see, book a date to visit, mess around with booking issues, and then pay fees. Most asset teams consist of geologists, geophysicists, petroleum engineers and a team manager. Getting everyone to take half a day to look at core is a challenge and often the result is reduced participation and reservoir understanding. Even if everyone travels to the AER, it is not possible to get more than six or so people around the core table who can see the rock and hear the presenter. This makes the sharing of issues and challenges difficult and the lack of communication can lead to important points being missed. Also, frequent visitors to the core research center have commented on the activities of 'core mice' eating the core (sampling for other studies). Furthermore, especially with oilsands core, degradation occurs over time via oil and water evaporation from the pay zones and water adsorption in smectite-rich zones commonly found in the cap rock.



A new way to overcome these issues is to use a large scale, high resolution computer touch screen monitor connected via Wifi to the corporate systems. This monitor can be part of a visualisation center in the team's office downtown. To feed the monitor it is necessary to scan the core with high resolution cameras, SWIR and XRF which can be done immediately after the core is cut, negating any degradation. The scans and pictures are then all depth corrected and formatted for the monitor.





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The scans are mounted on a desk top in a horizontal position so that all the team can see and interact with the screen. Using finger controls similar to those used with cell phones, the pictures and logs can be zoomed in and scrolled to examine areas of interest in real time.

This new technology makes virtual core viewing a viable alternative to the core storage trip, saves time and provides images that are always fresh, unsampled and available to the whole team at any time.