Physical Core vs Digital Core: Balance Between Touch-and-feel and Efficiency

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Digital core images or digital core are shot routinely on oil sands core in Canada. They and their hardcopy version – photography are acquired very often, surprisingly, for the completeness of well data. Their values and potential are not fully recognized or utilized by many geologists. With advance in high-resolution digital imaging technology and assistance of computer software, digital core offers several advantages over physical core except touch and feel of physical core, including accuracy, consistence and efficiency in core depth correction and sample selection. These advantages are well demonstrated in handling large volume of core for oil sands projects. In addition, they can be used to derive some data that physical core cannot provide, such as Vsh quantification.

Digital Core Workflow

Well Logs Borehole Images Products Corrected Core Depths Corrected Sample Depths Annotated Core images Facies Strip Logs Facies table Data CDs Geologists