

# SEG 2022 Conference: Minerals For Our Future

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## **XRF Core Scanning; Continuous Scanning Versus Point Scan: a Practical Review**

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Chemical assays, directly on fresh or historical core, with modern Energy Dispersive X-Ray spectroscopy (EDX) are not longer an academic exercise but commercially available solutions. Several different service providers and instruments are in the market offering various solutions and setups. In the talk we are comparing the performance of a continuous EDX core scanning system (Minalyze CS) on core and RC Chips with an automated point scan system using a modern pXRF, implemented as the Geochemical Research Assistant (GERDA). We will cover the method limitations with respect to the origination of the X-ray signal, e.g. analyzed layer and the instrument calibration(s).

Instead of a head to head detection and performance approach of the vendor specs we are presenting the respective ideal and non-ideal use cases with different examples from the collection of core and chips by Colorado School of Mines. Typical machine throughput experienced in operation as well as well as additional deliverables will be compared as well.