VERACIO™

Scanning Core and Chips

Multiple Data Streams in a Single Scan

About Veracio

Veracio provides mineral exploration and mining companies with a range of technology solutions that are specifically designed to improve the speed, richness and reliability of core sample and downhole data.

Veracio offers a range of solutions that improve, automate, and digitally transform their orebody sciences in exploration, resource definition and production. Championing a modern approach through a diverse product portfolio Veracio fuses science and technology together with digital accessibility by using advanced scanning, sensing with strong data governance and the deployment of AI to accelerate real-time decision making and significantly improve efficiency, profitability, and sustainability across the value chain.

How It Works

Multiple Data Streams in a Single Scan

Mineralogy

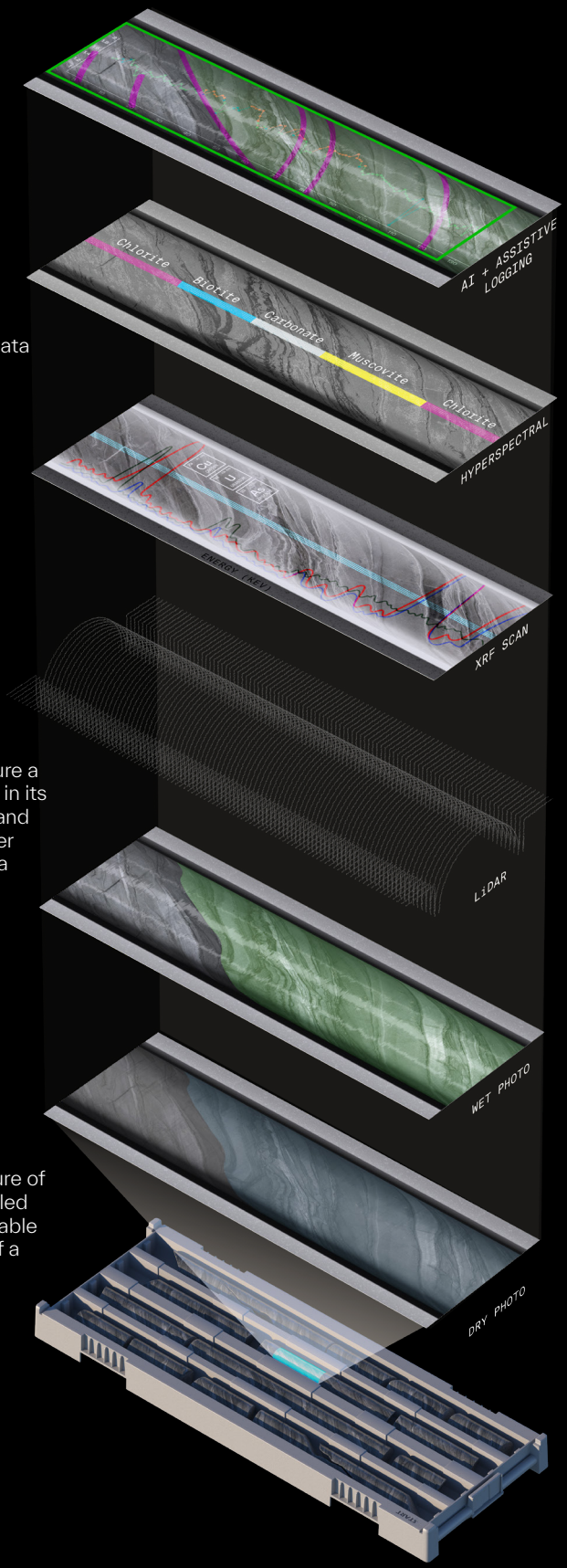
In a world-first technology, available in Q3 2024, we will provide hyperspectral scanning that is co-registered with XRF data and provided within 24 hours.

Topography

Using LiDAR scanning we capture a point cloud of the scanned core in its core box. Recording the profile and topography of the core for further analysis and derived data such a volume and bulk density.

Automation

The handling, logging and capture of core is semi-automated, controlled and achieved in a highly-repeatable manner under the supervision of a single field technician.



Assistive Logging

Core Scanning enables the collection of multiple data sets (attributes) on the same basis such that they are ready for use in analysis and statistical processing including machine learning and AI.

AI and machine learning is increasingly being used by the mining industry to extend the interpretation and make more from the available data.

Geochemistry

Non-Destructive, Multi-Elemental Assays Our scanning technology provides across the Periodic Table.

Using market-leading XRF technologies, we offer the widest elemental range at the lowest detection limits available.

Photography

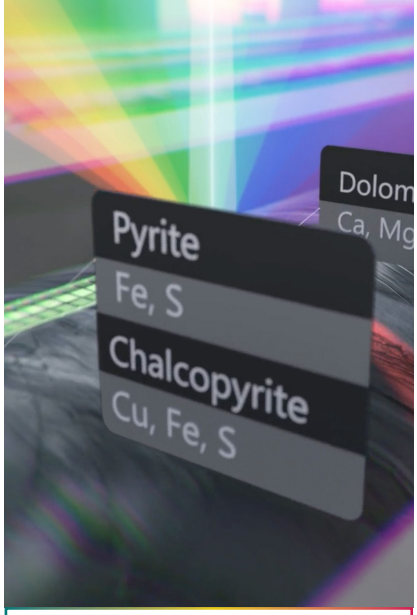
An automated process that captures high resolution photos of both wet and dry core.

Controlled environments ensure scaled campaigns of core processing are captured and recorded on the same basis.

TruScan® 2 | FEATURING HyperXRF™

Mineralogy + Geochemistry in 24 Hours

HyperXRF is a targeted hyperspectral system that provides rapid and high-quality mineralogical results. Seamlessly integrating with XRF data, it revolutionizes the way mineralogical analysis is conducted.



While Hyperspectral imaging has a habit of being large data sets that take weeks and sometimes months of manual processing. Our approach to VNIR and SWIR hyperspectral scanning provides mineralogical results within 24 hours.

VNIR+SWIR+XRF

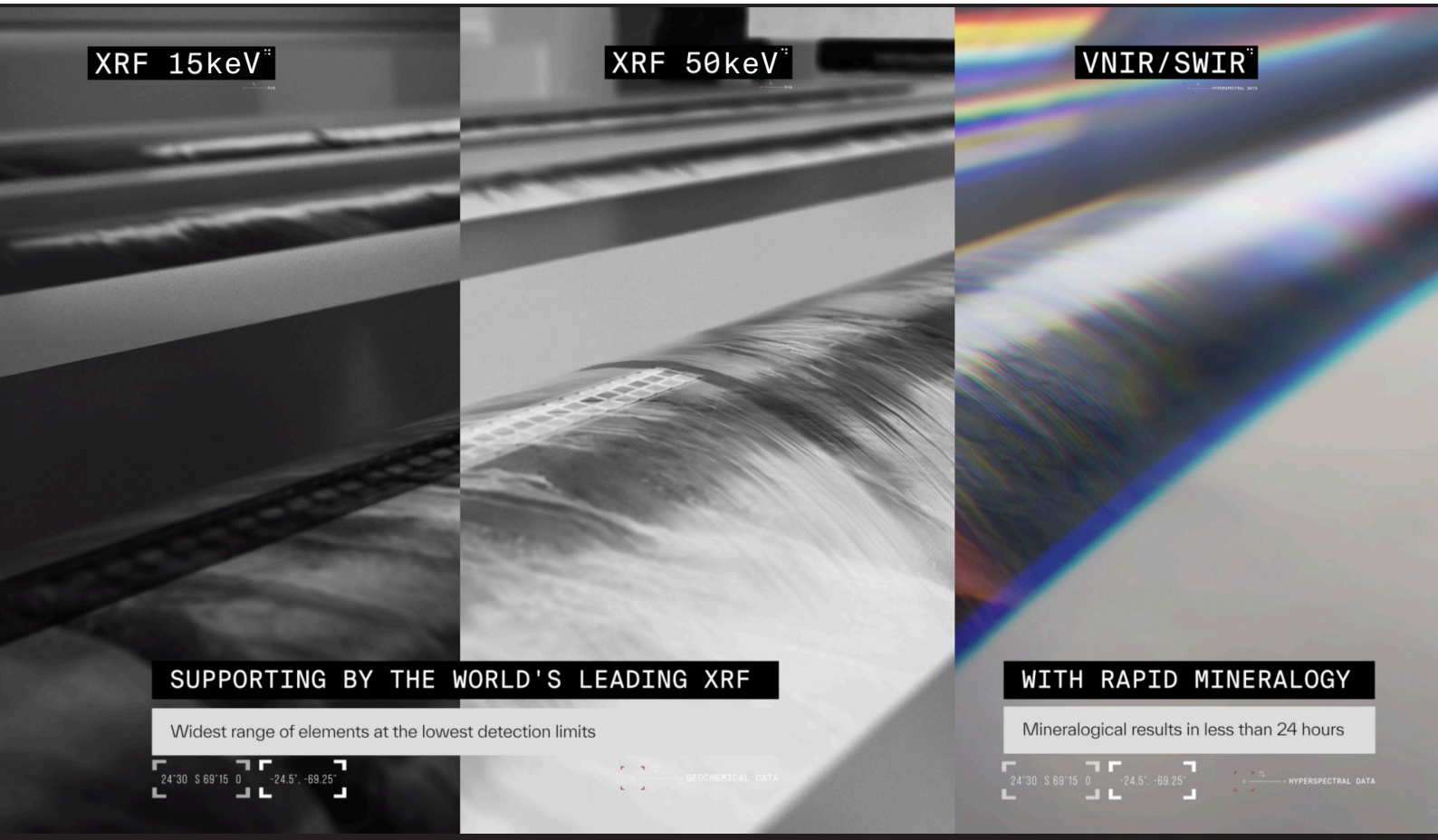
The width of the XRF beam and the pixel-width of the hyperspectral scan are identical. Allowing for the accurate measurement of continuous mineralogy and elemental geochemistry from the same location on core or chips.

RAPID RESULTS

Hyperspectral data that is efficient enough to be delivered day of scanning; by being just large enough to reliably inform decisions.

AUTOMATED QAQC

Purpose-built instrumentation drives a robust QA/QC process involving sensing, AI and spectral geoscientific review. This means consistency of data between geos, and systems integration, directly from site.



CAMPAIGN OPTIMIZATION

ACCELERATE • ADAPT • TARGET

Campaign drilling can be a delicate interplay between accuracy and cost, that becomes even more complex when drilling is done in an information vacuum.

Experience the transformation of the drilling process from an intricate puzzle to a streamlined opportunity. Choose Veracio, and establish your mining operation at the forefront of drilling excellence.

ASSISTIVE LOGGING

SCAN • LOG • STREAMLINE

The interpretive nature of core logging is facing a paradigm shift in grappling with the challenges of reconciling fragmented datasets with the emergent power of AI.

Assistive Logging rises as a solution, harmonizing tradition with innovation, ensuring even greater precision and assurance for core shed workflows that result in data that is not just consistent, but optimised for AI.

GRADE CONTROL

ORE • WASTE • IMPURITIES

The delays inherent between blasting and the receipt of assay results makes short interval control challenging and sometimes impossible.

Both Veracio's TruScan and Minalyzer offer rapid assays and geochemical data for Comminution Optimisation and Mineral Processing Plant Optimisation within the shift planning window.

WASTE • WATER • ENERGY • TAILINGS

SMALLER FOOTPRINT

Mining practices that don't just extract value from the earth but do so with a profound respect for it.

Smaller environmental footprint mining is intrinsically linked to the precision of Feasibility Studies, the robustness of Mine Design, and the accuracy of Resource Modelling. The better these foundational pillars are constructed, the more streamlined and environmentally conscious the entire operation can be.

Veracio stands at the forefront of this paradigm shift, pioneering tools and methodologies that facilitate Campaign Optimisation, Accelerated Studies and the detailed understanding of Metal Deportment, the potential for targeted Ore Sorting becomes a game-changer.

By ensuring ore is processed efficiently and processed waste is minimised, mines can maintain their productivity while treading lighter on environmental fooprint, carbon and energy use, water and tailings; all while maximizing return on capital.

The widest elemental range at the lowest detection limits

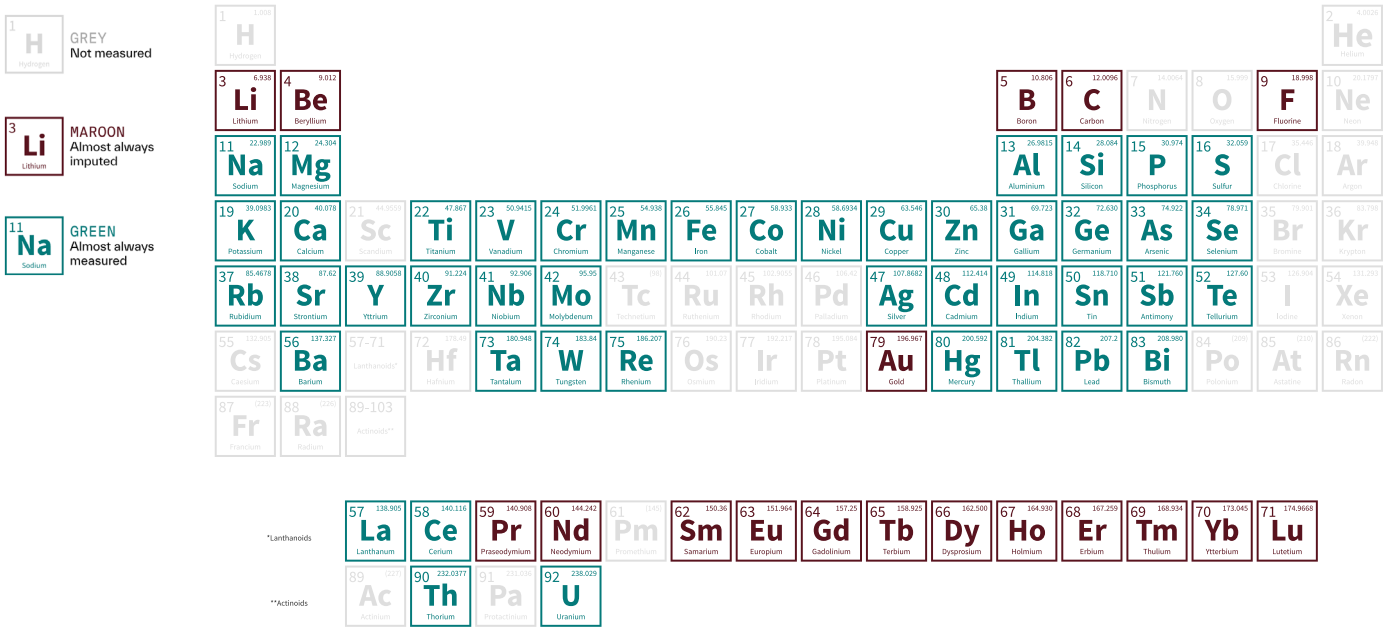
Veracio has captured the best of XRF core scanning technology to analyze drill core and chips for a wide range of elements, delivering exceptional performance in core scanning.

Tailored to analyze drill core and chips for an extensive range of elements, TruScan™ setting new benchmarks in accuracy and detection capabilities.

Incorporating photon assay techniques, both MinalyzerCS and TruScan ensures that the data derived is not only accurate but also reflective of real-world conditions through matrix matched calibration.

With a commitment to precision, a broad elemental detection range, and state-of-the-art XRF assay methodologies, it is poised to reshape the way we perceive and utilize core scanning in the industry.

With a patented approach that achieves the industries' widest elemental range at the lowest detection limits available, TruScan™ stands as a testament to recent advancements in XRF assay techniques.



Start with what you have

Scanning and assistive technologies not only consistently capture high-quality data, but also greatly reduces labor demands while elevating logging outcomes.

Whole and half core scanning

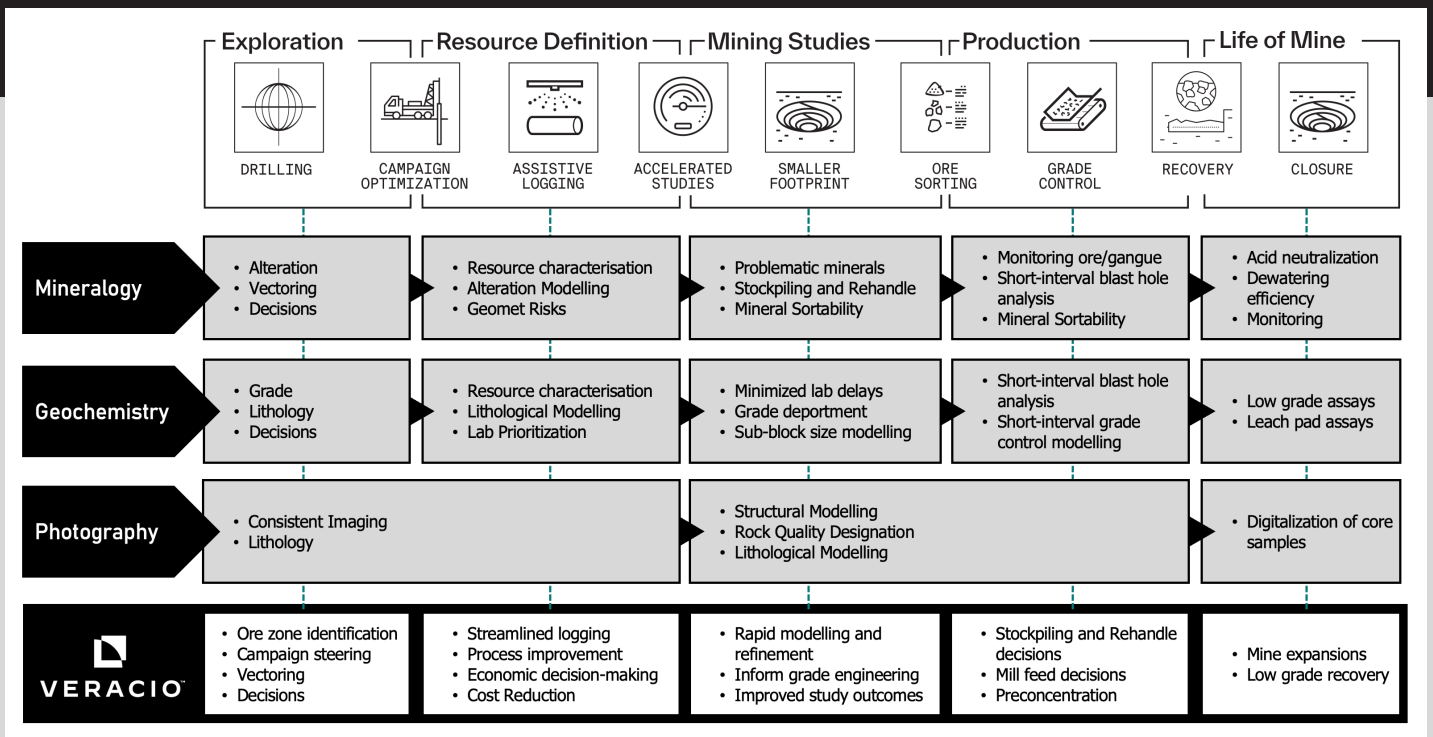
Continuous XRF scanning Diamond Drill core in trays along with post-processed and cut samples of the same.

Chips, jars and pellets

Everything from RC chip trays to homogenized and fine-grained material that has been prepped as a controlled sample.

Transform your workflow

Veracio's core scanning technologies, along with their integrated software solutions, provide drilling and geology teams with new ways to optimise their productivity. Streamlining data acquisition while increasing data consisstency and fidelity.



As the lifeblood of drilling campaigns, the TruScan™ offers unparalleled precision, allowing geologists and mining professionals to extract richer, more detailed data from drill cores than ever before. This high-resolution insight translates into enhanced decision-making, ensuring that drilling campaigns are more targeted, resourceful, and yield better results.

Matrix Calibrated XRF of Core and Chips

TruScan™ offers explorers and mine geologists non-destructive and accurate elemental data of chips and core, right there in the field. Capable of scanning 80 to 100m (200 to 300 ft) of core per 12-hour shift (depending on required data density) and many more meters (feet) per shift on RC chips, a single unit can potentially scan the core from multiple drill rigs, legacy core, or a combination of both.

Automated QA/QC

TruScan's built-in QA/QC functionality uses a 'V-arm' to host standards in the form of 'pucks' that represent either a site standard, blanks, or OREAS materials. The automated process scans a known puck every 'X' (defined by user) number of boxes in order to make sure the instrument is operating within set parameters.

Assistive Logging

By being connected to the source, and in real time, TruScan™ sets the stage for the digitization of your Core before oxidization, handling errors and bad data get in the way.

The Unique Advantage: TruScan

WET AND DRY PHOTOGRAPHY

TruScan™ features two (2) high-resolution cameras that take photos of the core both wet and dry with strong control of lighting, focus consistency of imaging. Ensuring photography samples are best-placed for downstream data science and AI with software like AutoLogger and TruStructure.

CORE LOGGING WORKFLOW AUTOMATION

Paired with Data + AI, core logging moves from being a traditionally labor-intensive and time-consuming process, and becomes a revolutionary change in core logging workflow. By automating the capture of geological features, these technologies not only drastically reduce manual errors and inconsistencies but also accelerate the logging process.

Minalyzer™

The MinalyzerCS is an advanced analytical instrument for geological data acquisition. A compact, bench-mounted, precision scanning environment with image classification, bulk density, specific gravity and 3D logging software.

Direct Core Scanning

Minimum preparation is needed to scan core trays with the Minalyzer. The Minalyzer scans cores directly in their trays and is in-different about the type of trays (e.g wooden, plastic, metal etc) and will scan core up to PQ in size. The Minalyzer also has the capacity to scan chip trays, pellets and pulps.

Non-Destructive XRF Scanning

Fast and continuous XRF scanning non-destructively generates high resolution analysis along the full core length. Receive more assay data while reducing sample preparation and logistics, without increasing the assay budget.

Topography

The topography scan in the Minalyzer generates a 3D model of the core and tray which constitutes the foundation for the following XRF scan. In bonus, several valuable datasets are generated from the topography scan.

High-Resolution Photography

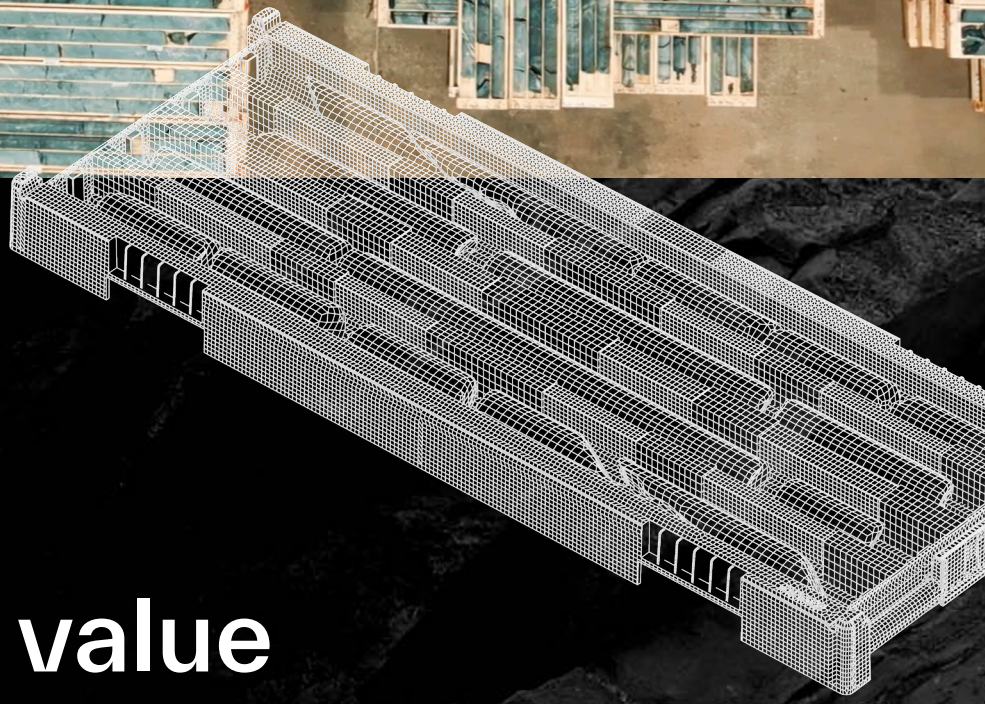
Data extracted from the Minalyzer is presented in a web based cloud software provides an enhanced experience.

EXTRACT SPECIFIC GRAVITY

This automated calculation simplifies the process of determining the specific gravity of various minerals and rock samples, enabling geologists to quickly assess material properties and make informed decisions based on the composition and density of geological samples.

BULK DENSITY FROM EVERY SAMPLE

This feature is particularly useful for evaluating the structural properties of geological formations, aiding in the assessment of reservoir characteristics, soil stability, and material suitability for various engineering applications.



VERACIO™

15 years of value from core-based decisions

Experience the next generation of geoscientific accuracy and efficiency with Veracio's cutting-edge core scanning technology.

MOST EXPERIENCED

We've worked in core scanning since 2009 and along the way, we've learned lessons from challenges our competitors are only starting to come to terms with.

LARGEST LIBRARY

We've accumulated over 4M meters of core scanned; the largest dataset for XRF of core logging in our industry.

The global leader in core scanning

Data + AI

Strata™

AI-assisted structural logging
TruStructure™

AI-assisted lithological logging
AutoLogger™

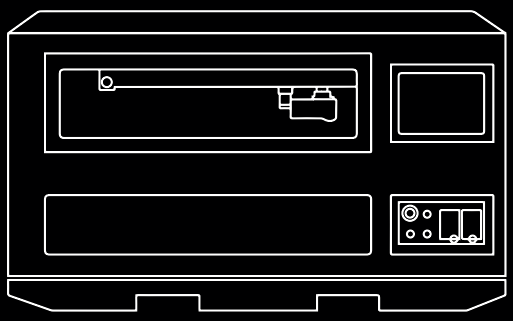
Secure data access in the cloud
TruAccess™

3D Core Analysis
MinaLogger™

Geotech + Geochem Analytics
TruVision™

Specifications

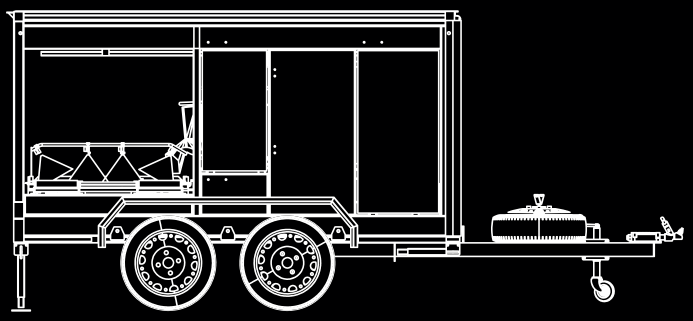
Minalyzer™



Power	400v
Peak Power	16 amps
Water	N/A
Requirements	Flat, level ground is required for operation

Width	1100mm
Length	1800mm
Height	1200mm
Maximum Tray Dimensions	530W 1100L 100H

TruScan™



Power	110v - 220v
Peak Power	<15 amps
Water	20litres/1000m of core
Requirements	Flat, level ground is required for operation

Length	3,400mm
Length (w/ hitch)	4,980mm
Width	2,310mm
Requirements	1220mm additional width for loading / unloading core boxes

Pre-Order Today

TruScan® 2 | FEATURING **HyperXRF™**

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Minalyzer

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