



**OREXPLORE**  
TECHNOLOGIES

# Orexplora Investor Presentation

April 2022

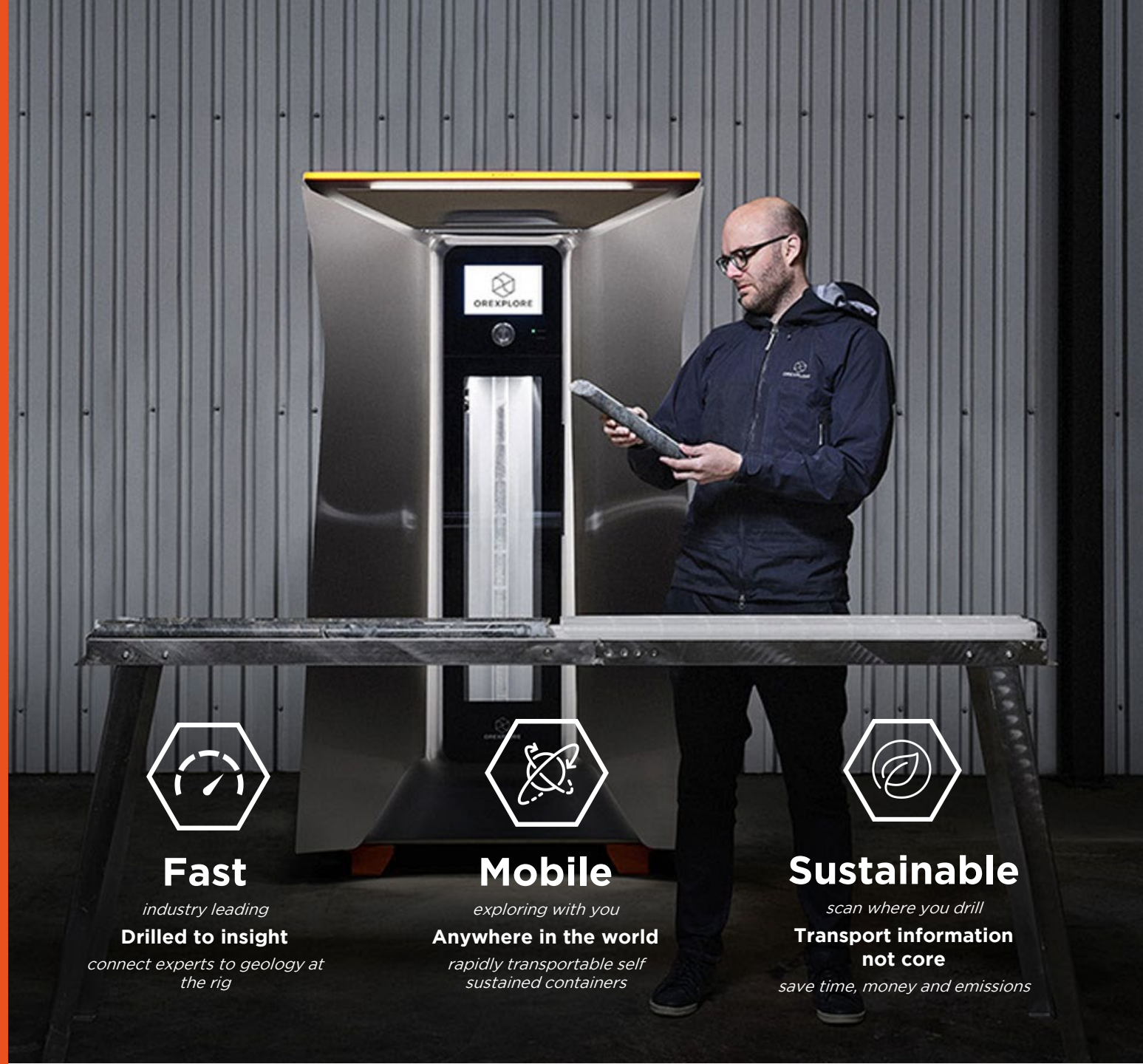
Perth | Stockholm

[www.orexplore.com](http://www.orexplore.com)



# Who we are.

- A commercialisation-stage mineral scanning technology company, established in Sweden and headquartered in Perth, Western Australia
- Aiming to transform the mining industry with a next generation non-destructive scanning technology to extract insights from drilled core in a faster, more sustainable way, improving decision making across the mining value chain
- Primed to capitalise on global mega-trends; surging metals demand; increasingly difficult exploration; challenging mine operating conditions; and accelerating ESG drivers



**Fast**

*industry leading*

**Drilled to insight**

*connect experts to geology at the rig*



**Mobile**

*exploring with you*

**Anywhere in the world**

*rapidly transportable self sustained containers*



**Sustainable**

*scan where you drill*

**Transport information not core**

*save time, money and emissions*

# Corporate Structure | ASX: OXT

Well funded to execute product commercialisation strategy, while ensuring financial discipline.

## Capital Structure

Shares on issue

**103,664,196**

Performance rights

**8,293,136**

Share Price (07.04.22)

**\$0.12**

Market Cap (07.04.22)

**A\$12.44m**

Cash position (31.12.21)

**~A\$12.64m**

**+ A\$2.44m** Priority Offer (07.01.22)

**No debt**

## Led by Experienced Board & Management

**Alan Bye**

Non-Executive Chairman

**Brett Giroud**

Managing Director

**Kent Swick**

Non-Executive Director

**Stefan Sädbom**

Non-Executive Director

**Stuart Carmichael**

Non-Executive Director

**Frank Campagna**

Company Secretary

## Top Shareholders<sup>1</sup>

Kent Jason Swick

11.91%

Circle 5 Management Pty Ltd.

10.94%

Perennial Value Management Ltd.

10.44%

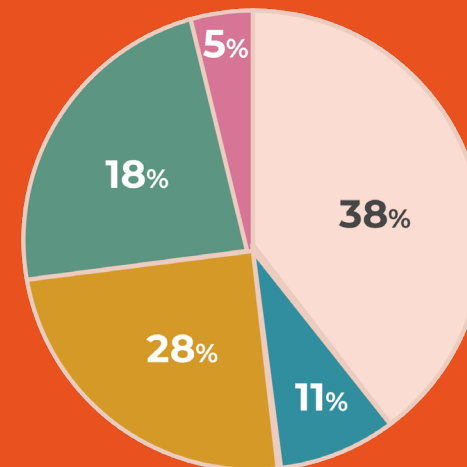
Castle Point Funds Management Ltd.

8.33%

Salter Brothers Emerging Companies Ltd.

7.38%

## % Shares on Issue



## Shareholder Structure



<sup>1</sup> As at 7th April 2022  
Source: S&P Capital IQ



# Global mega trends.



## Digital Transformation

- Technology enabled business model evolution
- Productivity
- Industry 4.0



## Workforce Evolution

- Skills shortage
- Remote knowledge
- Transitory workforce
- Tech decision support



## Business

- Mining techno-economics
- Increasing global competition
- Doing more with less
- Risk quantification and control



## Automation

- Manufacturisation of mining
- Human-machine collaboration
- Autonomous systems & vehicles



## Metals Demand

- Energy transition
- Rare earths
- Electric vehicles
- Developing nations



## Sustainability

- Ethical investment
- Social value
- Emissions targets
- Natural environment
- Global targets



## Accelerating Value Chains

- Business models synchronising to accelerating markets
- Rapid reconfiguration to service market opportunities



**“Technology powered decision support is vital to capture value through these global transitions. Oreplore’s drilled to insight time connects geologists to ore bodies within hours of drilling.”**

Brett Giroud - Managing Director



# Market Potential.

Drilled core market

**107.8** <sup>CY22</sup>  
Million Metres



New core drilled per annum: Forecast CY30 of **128.5m**

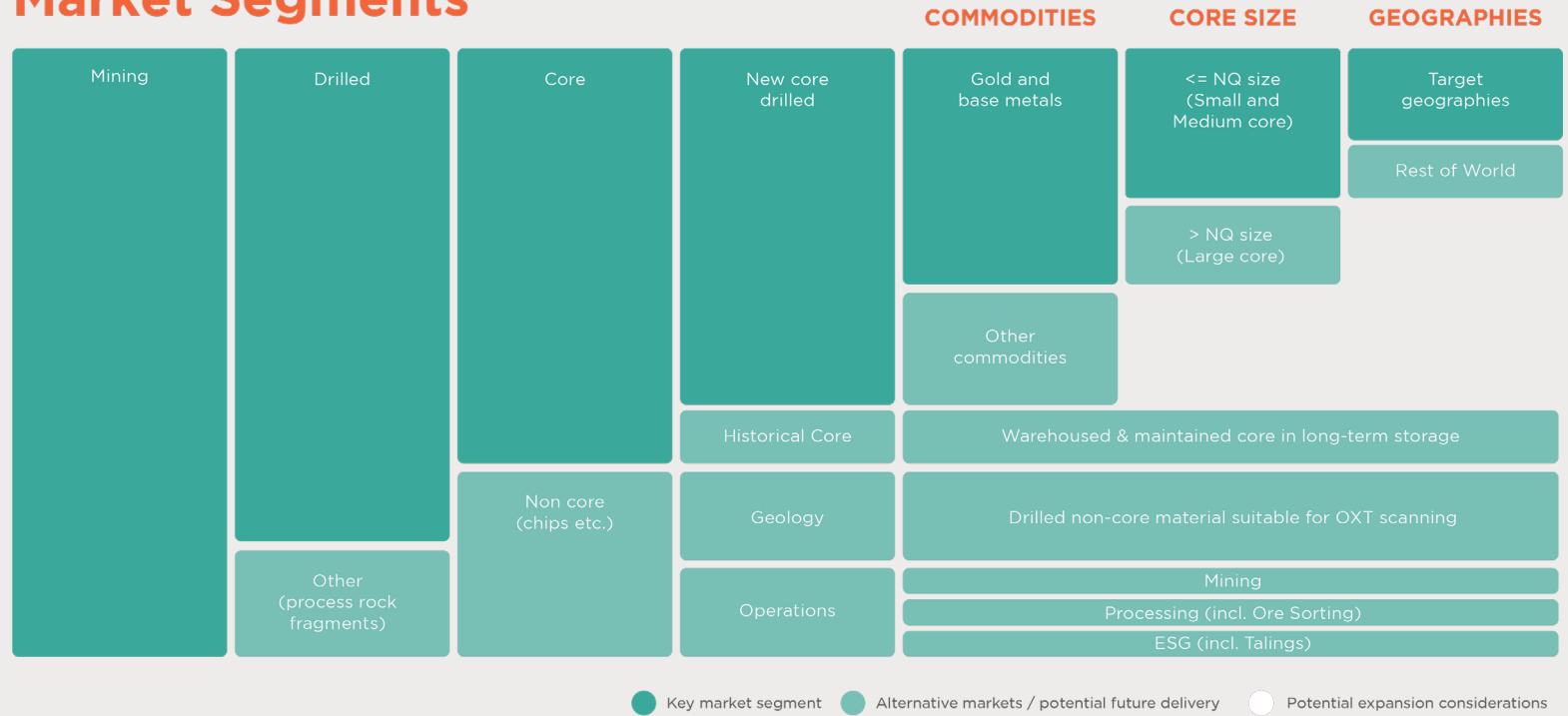


**Precious Metals**  
Gold



**Base Metals**  
Nickel, Copper, Zinc, Lead

## Market Segments



Australia



Europe



Latin America



Canada & USA



Pacific & SE Asia

Source: Minex Consulting - Independent Technical Report - On the available global drilling market for Orexplore technologies Limited - October 2021 - See Orexplore Prospectus - Annexure C

# Mining transitions.



**Digital Transformation**



**Sustainability**



**Business**



**Automation**



**Metals Demand**



**Workforce Evolution**



**Accelerating Value Chains**

## Exploration

- Diminishing discoveries
- Campaign efficiencies
- Pressure to become a producer quickly

## Stakeholders

- Continually expanding
- Accelerating expectations
- Demonstrating leadership across domains - ESG, Carbon

## Operations

- Productivity pressures
- Skills shortages & changing ways of working
- "Do more with less"

## Projects

- NPVs under pressure
- Challenging techno-economics
- Technology adoption
- Evolution of engineering

## Corporate

- Evolving business models
- Global competition
- Complex dynamic value chains
- Synch to accelerating markets
- Access to capital



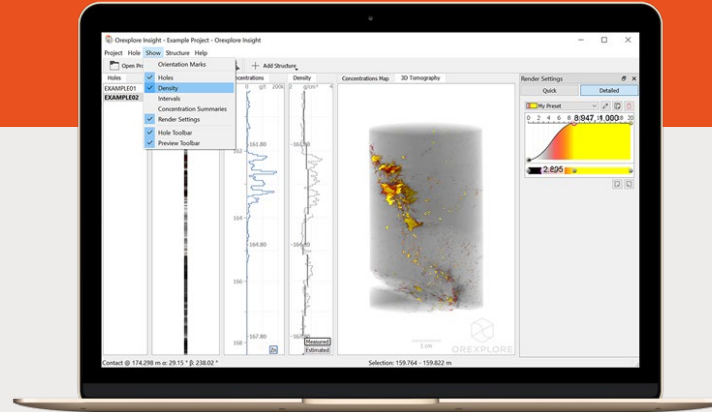
**Orexplore provides traction through transitions**

- Decision support
- Operational transformation
- Corporate value
- Risk and Sustainability





# Technology platform.



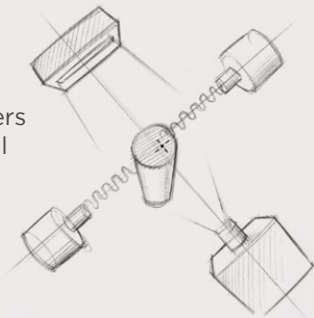
## GeoCore X10 ®

### High Energy X-ray Source

XRT (X-ray transmission) CT provides 'through-the-core' structural 3D imaging used to estimate potential elemental composition, geological structure, texture & density.

### Spectrometers

XRF Spectrometers provide elemental detection at the core's surface.

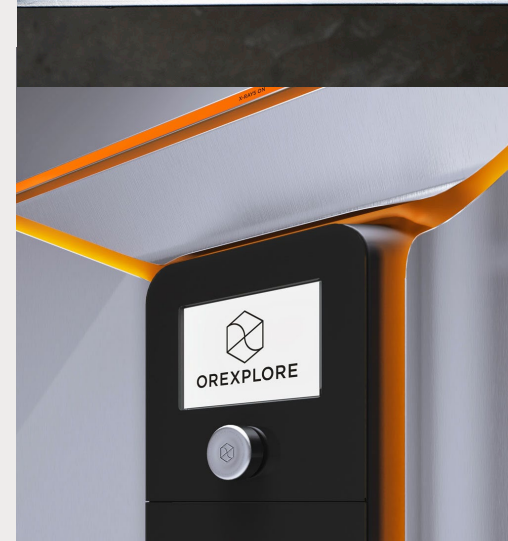


- **Fast:** scans four x 1m cores at a time, in less than 15 minutes per metre.
- **Versatile:** non-destructive scanning of both core & non-core (chips etc.) material.
- **Easy:** requires minimal skill set to operate. One technician can operate up to 3 machines.

## Insight software platform

Orexplore's software system, **Orexplore Insight®**, provides users with the ability to interact and analyse the scan results obtained from the GeoCore X10®. It provides 3D-visualisation of the core and the ability to further analyse the resource and physical information, providing rich capability to understand, interpret and extract key information contained within the sample such as:

- Geological structures
- Lithology / texture
- Density - high resolution
- Rock mechanics & physical characteristics e.g. RQD
- Particle detection
- Detected elements
- Emerging geochemistry



# Our capabilities.

## Geochemical

Detected elements and emerging geochemistry

Elements - continually improving the accuracy and number of elements that can be detected.

Dense particle detection

Detection of the location of dense particles within the entire core down to 100-micron particle sizes.

## Geological

Lithology / texture

Semi-automatic identification and logging of lithological features.

Rock mechanics

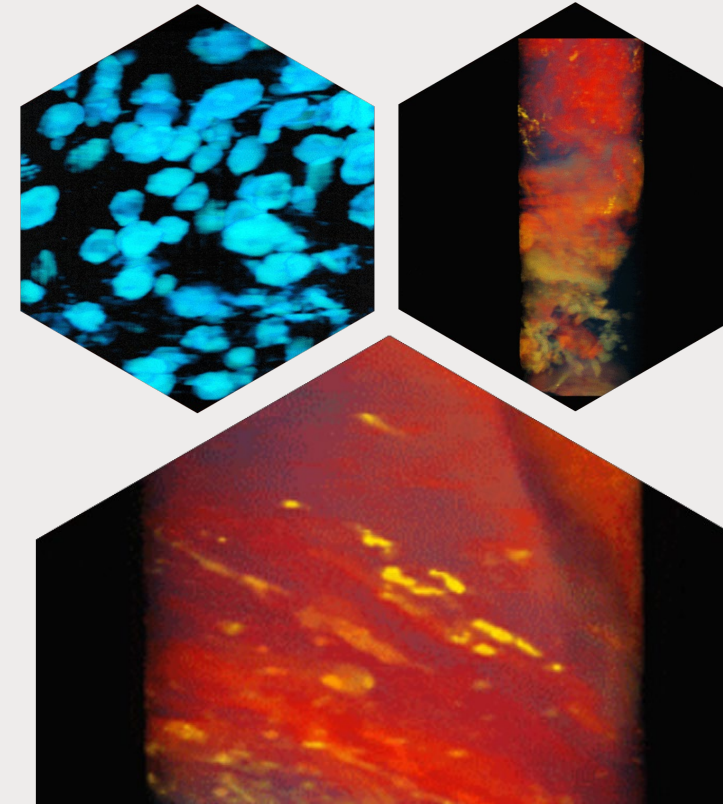
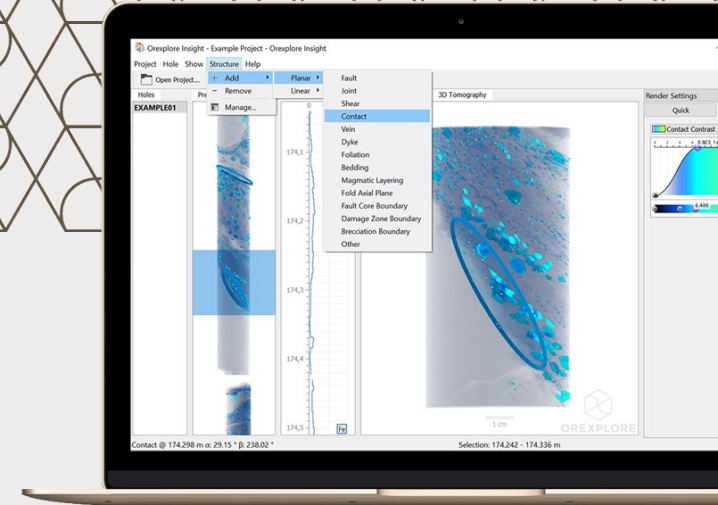
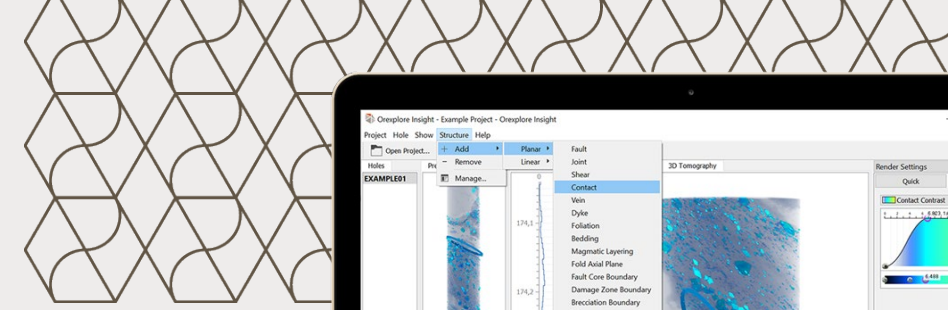
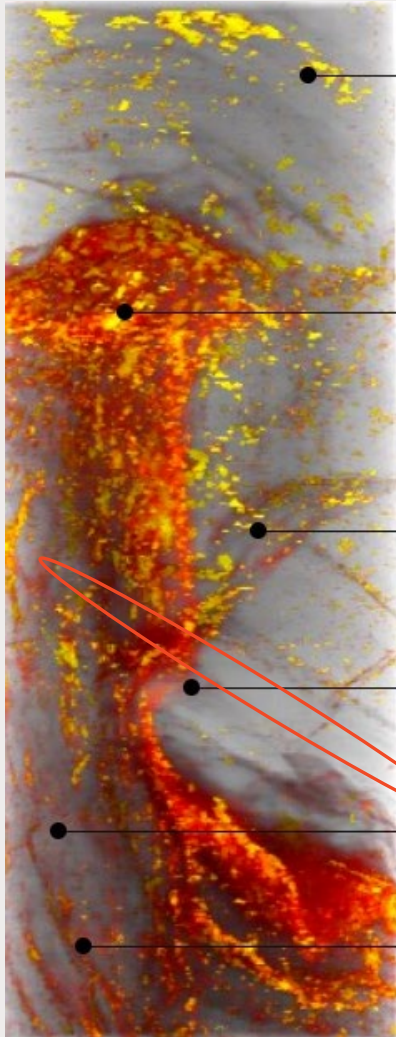
Collection and annotation of rock mass data incl. rock quality designation (RQD), detailed assessment of joint orientation and infill.

Structures

Bedding planes, veins, folds and lineations through the core - oriented and exportable to 3<sup>rd</sup> party software.

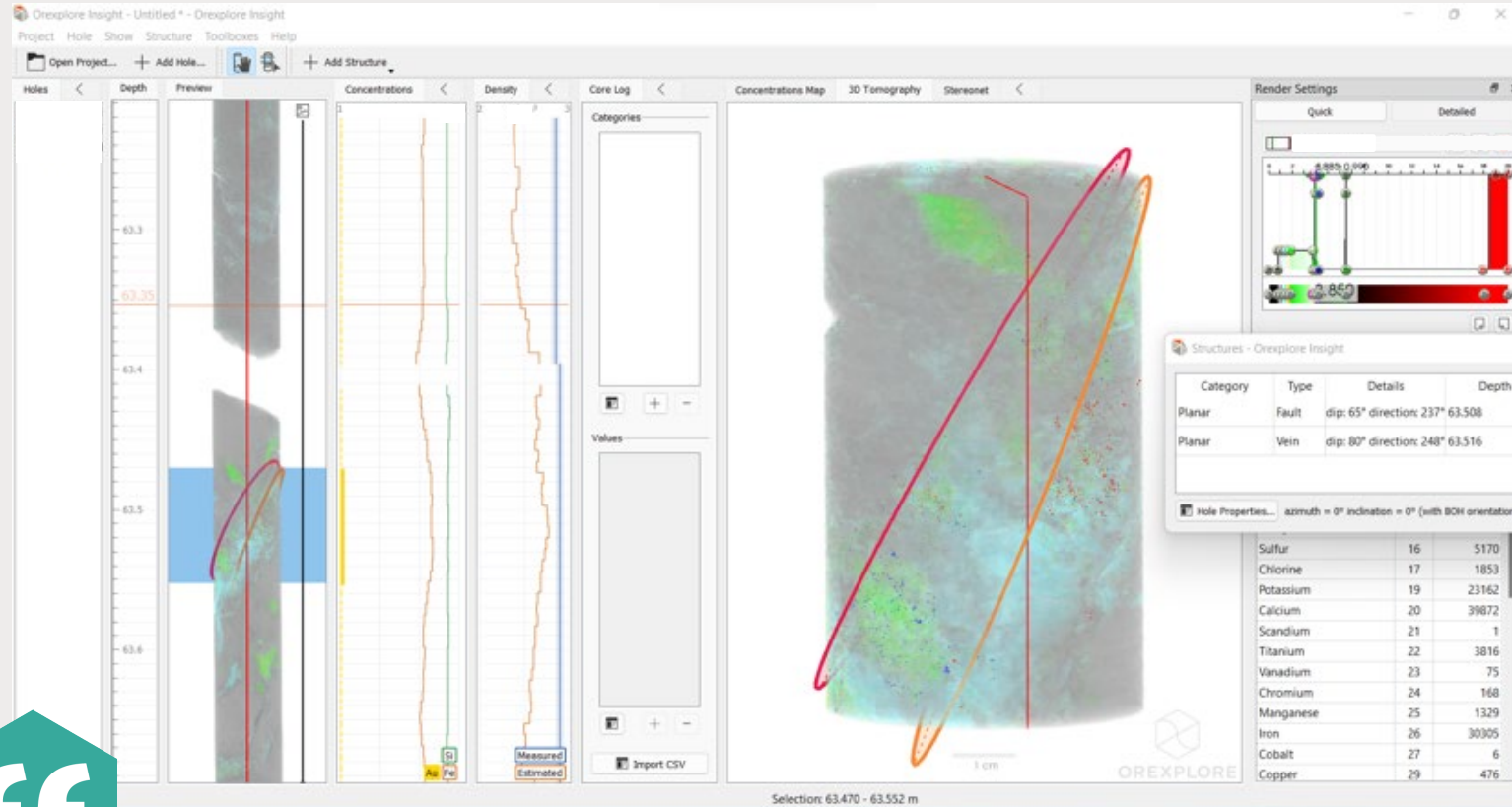
Density

Accurate density measurement of each core sample. Inferred density up to 25 sample points per metre.



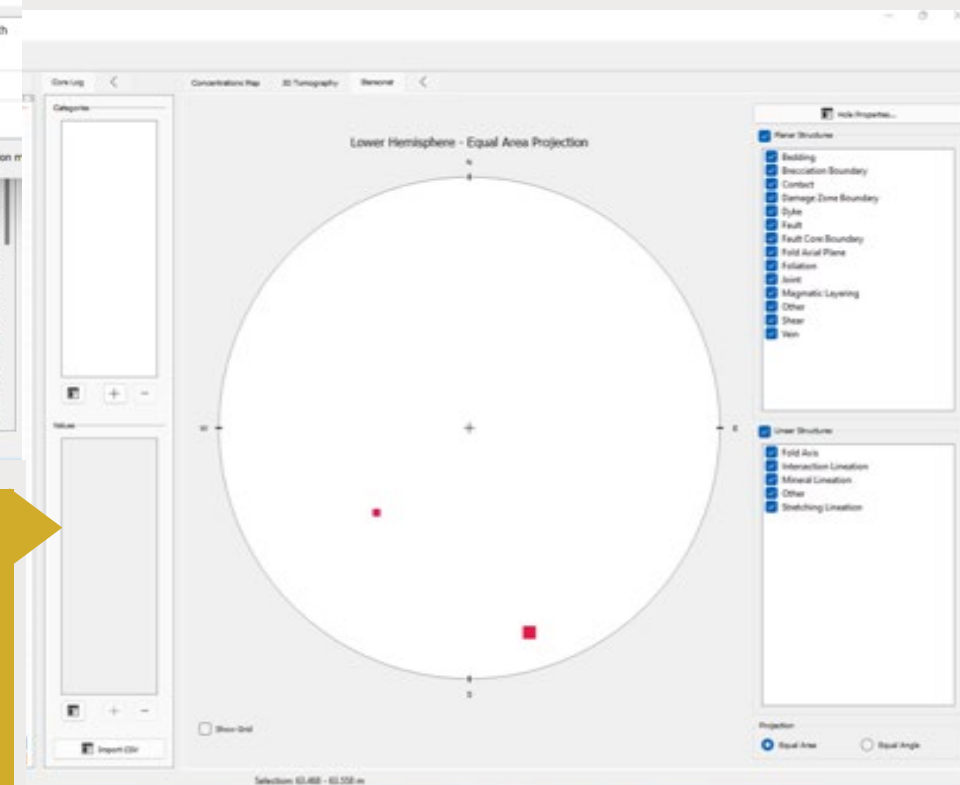


# Structure & Geotechnics.



## Structural Mapping

- Amenable to rapid and reliable collection of structural features from the surface and internal composition of the core
- Used to support determination of sequence of events and mineralised features



“It allows us to study many details of the drill core which cannot be seen macroscopically; in oriented drilling, this technology can be very helpful in planning further exploration and mining.”

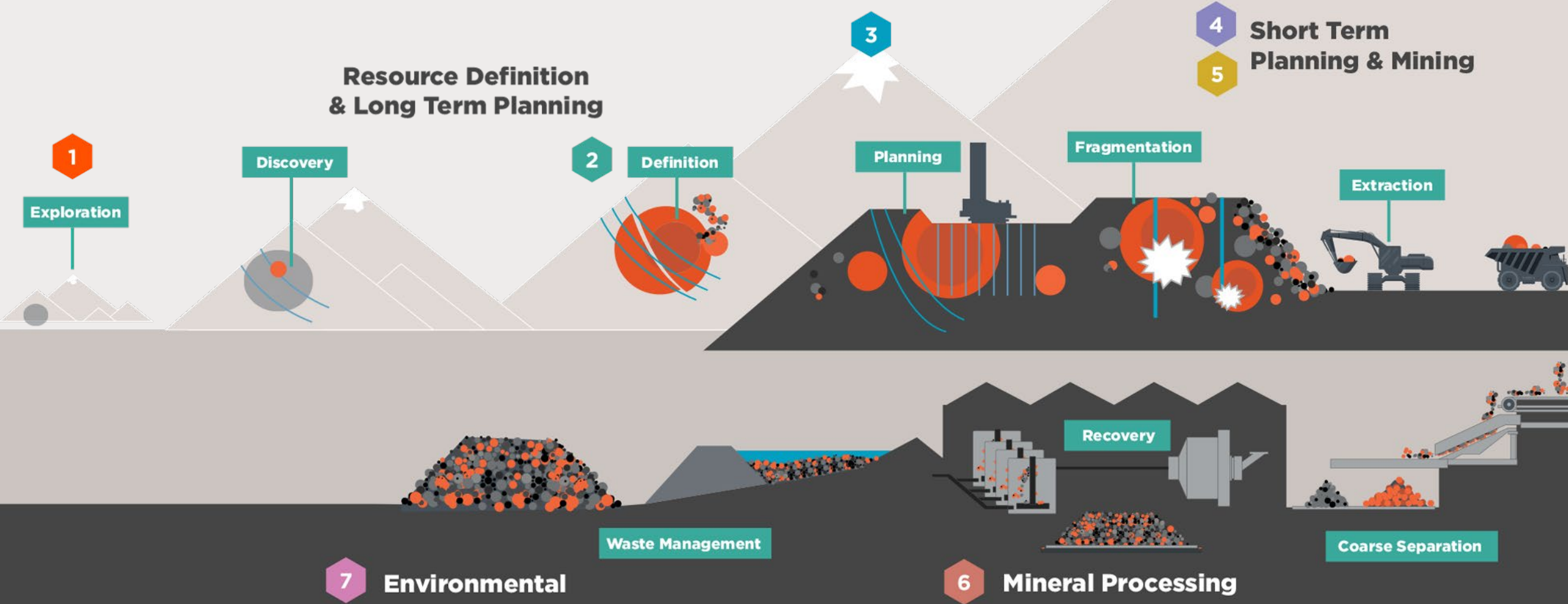
- Desislav Ivanov

## Geotechnical Assessment

- Augment traditional measures and assessment using scan data with hands on logging
- Auditable trail of data for use in mine design and execution

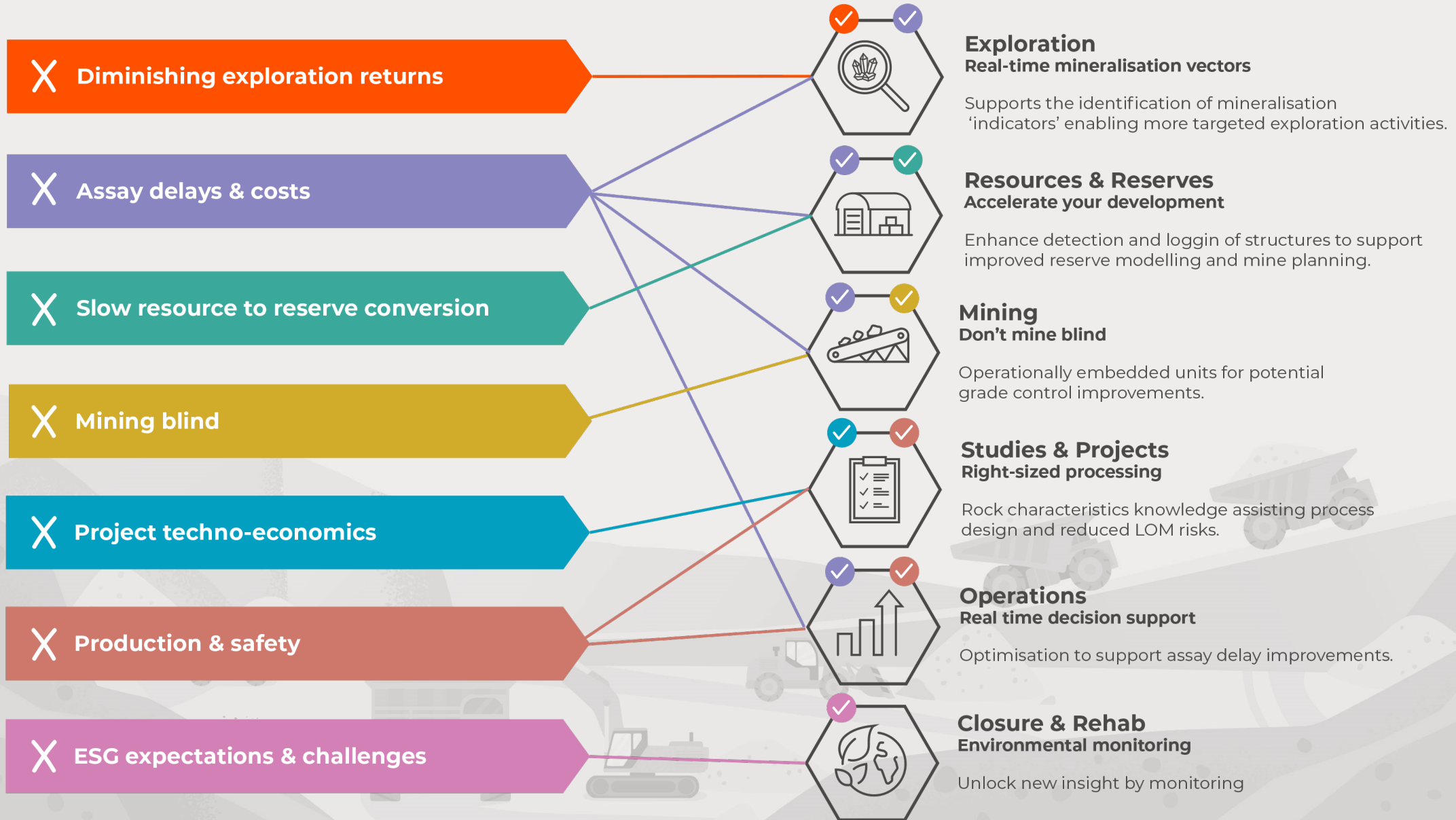
# Industry pain points & opportunities.

- 1 Diminishing exploration returns
- 2 Slow resource to reserve conversion
- 3 Project techno-economics
- 4 Assay delays and costs
- 5 Mining blind
- 6 Production and safety
- 7 ESG expectations and challenges





# Your challenges, our solutions.

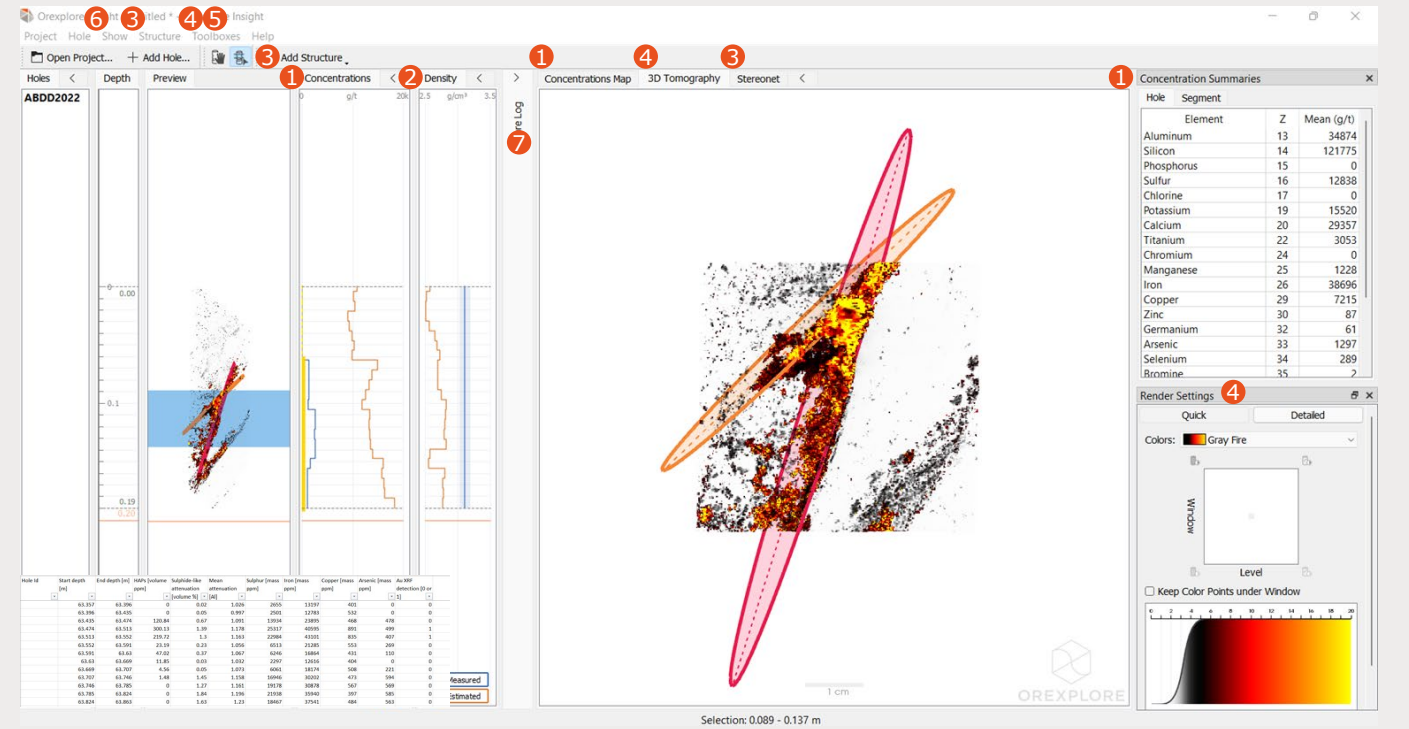
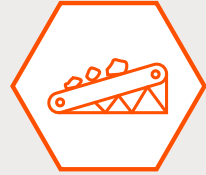




# Diminishing exploration returns.

Our consulting geologists are powered by the multi-sensor GX10® 3D imaging (CT/XRF) field unit and Insight software® to help you unlock value across the breadth of the mining value chain and support you to make quick, value-based decisions

- How could I **optimise and prioritize my samples** so that I get **conventional assay back quicker** and potentially save money by reducing my sampling?
- Could my **dense particles possibly be gold** or another target mineral?
- What could be my **key ore-bearing structures**?
- How could I potentially **improve safety** by reducing geotechnical risk?
- Would **density modelling optimize resource tonnages**?
- What could my **alteration minerals be** and how can I use them to find ore?
- How can I better understand my **vectors to ore**?



- Emerging Chemistry
- Density
- Structural Analysis
- Tomographic mineralogical analysis and rendering
- Core photography import
- Data export to your data warehouse (chemistry, density, structure, particle analysis reports)
- Lithology logging (import/export)



# 2022 Strategic Priorities.



## Capabilities

**Operations and maintenance** – people, processes, & systems to support deployments

**Business Development** – strategic sales leader building processes and customer out-reach through "seller-doer" model

**Engineering & Data Science** – advancing technology capabilities and performance

**Geology team** – driving product-market fit through customer value propositions

**Corporate** – robust financial management, governance & strategic growth



## Commercialisation

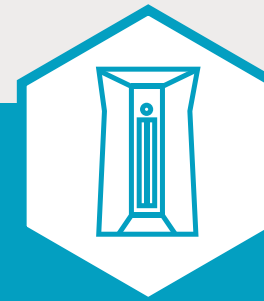
**Customer engagement** – demonstrating transformational technology value & solving pain points

**Focused market entry** – value propositions meeting market demands:

- *exploration challenges – decision support*
- *project economics – ore body characterisation & sorting*
- *assay delays – operational sample optimisation*

**Pipeline** – guiding customers through trial & adoption pathways & building the pipeline

**Deploying the fleet** – site-based deployments and increased laboratory scanning and projects



## Technology

**Market driven advancement** – value proposition driven technology roadmap  
**GX10 fleet** – high reliability, upgraded, & operationally ready

**R&D** – advancing strategic projects to unlock further value propositions

**Speed** – steep increases in scanning speeds

**Insight software** – functionality and performance upgrades to power value proposition growth

**Decision support** – data science and machine learning techniques advancing the platforms capability



## Commercialisation

**Wiluna Mining Contract** – Commercial field deployment supporting exploration program

**Laboratories** – delivering commercial projects and trials including a 1000m+ project and a set of small scale trials

**Field trial** – full scale field trial with international gold miner undertaken

**Value propositions** – refining and developing value propositions through trials and projects

**Sales** - strategic sales leader to accelerate customer out-reach and sales funnel

**Marketing** – industry and customer engagement and advancing the reach and effectiveness of communications



## Capabilities

**Listed** – demerger from Swick mining services, and ASX listing 21 January 2022

**Finance & governance** – CFO commenced ensuring robust financial management and governance

**Functions** – finance, HR and IT remain outsourced for cost efficiencies

**High performing teams** – Engineering, Geology and product development teams tightly integrated and accelerating delivery

**Operations readiness** – strengthened internal capability to deliver, operate and support field deployments



## Technology

**Technology advances** – upgraded the speed and capabilities of the fleet

**Advancing core and chip handling** – prototyping next generation core handling systems to respond to industry requests

**Customer driven roadmaps** – market pull driving technology roadmaps

**Orexplora Insight®** – functionality and performance roadmap accelerated

**QA/QC** – further embedded across the platform and geological QA/QC advanced

**Core engine** – products group driving functionality and performance of the platform core engine to support value proposition development and deployment

**Future horizons** - R&D projects focused on unlocking future capabilities to support broadening solutions and markets

# Recent Progress.



**“Orexplora allows us to understand sulphide deportment and mineral association throughout drill core and waste materials in a truly unique manner.”**

**Manager - Hellas Gold**



Fast



Mobile



Sustainable

## ASX ANNOUNCEMENT

29 March 2022



**OREXPLORE**  
TECHNOLOGIES  
ABN 98 645 505 406

## Orexplor signs Commercial Agreement with Wiluna Mining

### HIGHLIGHTS

- Commercial site deployment of Orexplore's Technology Platform at Wiluna Mine Site.
- Two-month agreement valued at circa \$170K for the scanning and analysis of ~2,000m of NQ core on-site.
- Illustrates increasing demand for faster, sustainable, field-based core sensing to support improved exploration decision making.



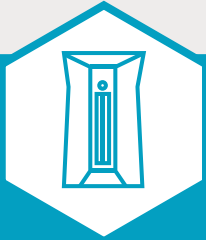
# Wiluna Mining Contract

“We are extremely pleased to collaborate with Wiluna Mining as they leverage technology to increase exploration value. This agreement further confirms the increasing demand for operators to receive fast, in-field information from drilling, that is fit for purpose, and highly targeted towards improving dynamic exploration decision speed and quality.”

Brett Giroud - Managing Director



# Key investment highlights.



## Next Generation Technology

- **Drilled to Insight** - IIOT\*<sup>1</sup> field sensing GeoCore X10® platform enabling remote geologists to analyse core hours after it is drilled through the Orexplora Insight® software
- **Drill for information** - ability to “see through” the core to generate 3D models extracting unique insight
- **Powering value propositions** - across the mining value chain through non-destructive scanning of core & non-core material
- **Field hardened** - technology across trials in Australia and Europe
- **Easy** - requires minimal skill set to operate up to 3 machines
- **Insight advances** - accelerating development of the Orexplora Insight® user interface software to drive value propositions

1 - IIOT - Industrial Internet of Things

2 - ESG - environment, social, governance



## Attractive Market Opportunity

- **Large and growing global addressable market**
- **Across the value chain** - enabling value creation and addressing pain points across the mining value chain
- **Positioned for global transitions** - helping customers to navigate global transitions such as digital transformation; ESG; and workforce evolution
- **Cross sector potential** application of the technology



## Scalable Business Model

- **Rapidly deployable fleet** - of GeoCore X10® units through a containerised field solution
- **Fast build time** - Units produced in less than a week allowing rapid response to demand
- **Scalable customer adoption** - cost efficient central geology team helping customers adopt the platform and deliver value
- **Central technical support** team and remote maintenance monitoring lowers ongoing fleet support costs
- **Ease-of-use** enables customers to transition to in-house scanning technicians
- **Demonstration laboratories** - demonstrating technology value on customer test batches of core and strategic development projects
- **“Deep Tech” vertical solution** - from field sensing hardware to user solutions through Insight software - superior to a “data analysis / geoscience” only business model that doesn’t control the technology / geology interface



## Focused Go to Market Strategy

- **Industry seasoned** technology delivery and support team
- **Customer engagement** - geology and sales teams demonstrating transformational technology value & solving pain points
- **Focused market entry** - value propositions meeting market demands
- **Technology advancements** - increasing performance and functionality powering value proposition development
- **Operations and Engineering** - to deliver and support units in the field
- **Well funded** to execute the strategy



# Contact.

Reach out to Orexplorer to learn more about our potential.

[info@orexplore.com](mailto:info@orexplore.com)

**Perth | Stockholm**

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**OREXPLORE**  
TECHNOLOGIES

# Appendix.





# Board of Directors.



**Alan Bye**  
Non-Executive Chairman

Alan is a highly respected industry figure with strong expertise on the innovation of the resource industry – covering both digital and extractive innovation technologies. Alan is the co-founder and Managing Director of Imvelo Pty Ltd, a Non-executive Director at Scitech, and holds council positions at SmartSat CRC & CSIRO. Alan has a Ph.D. in Mining from the University of KwaZulu-Natal.



**Brett Giroud**  
Managing Director

Brett brings over 24-years of technology delivery, creating and leading large high performing teams. He has driven mining industry transformation and delivered systems and technology across over \$15B of capital projects. Brett has created and led business units, lectured on future systems and is a sought after advisor to start-ups. Brett was previously the Chief Engineer (ICT) for Jacobs (SKM) Engineering, and APAC head of Strategy and Transaction Services for Worley (Advisian). Brett has a Bachelor of Engineering & an MBA from the University of Western Australia



**Kent Swick**  
Non-Executive Director

Kent is a Mechanical Engineer with over 30 years' experience in civil construction, mining maintenance and surface and underground mineral drilling. Kent successfully founded and has led (Managing Director) Swick Mining Services Ltd since its inception. Kent has a Bachelors of Engineering from the University of Western Australia and has completed the Owner/President Management program at Harvard Business School



**Stefan Sädbom**  
Non-Executive Director

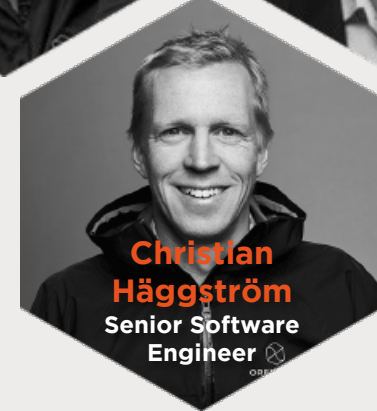
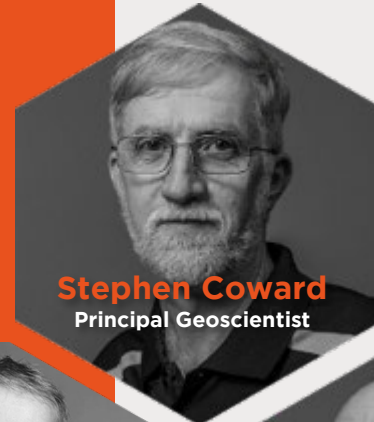
Stefan is a senior exploration geologist with over 35 years' experience in exploration and underground mining. Through various entities, Stefan has been deeply involved in several Swedish and European innovation projects relating to the improvement of the mining industry. Stefan sits on the board of a number of other Swedish listed and non-listed entities. Stefan holds a Bachelors of Geology from Uppsala University



**Stuart Carmichael**  
Non-Executive Director

Stuart is a Chartered Accountant with over 20 years' experience in the provision of corporate advisory services both within Australia and internationally. Stuart is a Principal and Director of Ventnor Capital Pty Ltd and Ventnor Securities Pty Ltd which provides corporate and financial advice to small-cap ASX listed companies. Further, Stuart acts as a Non-Executive Chairman / Director for a number of other ASX listed companies

# Key Personnel.



# Business Model.

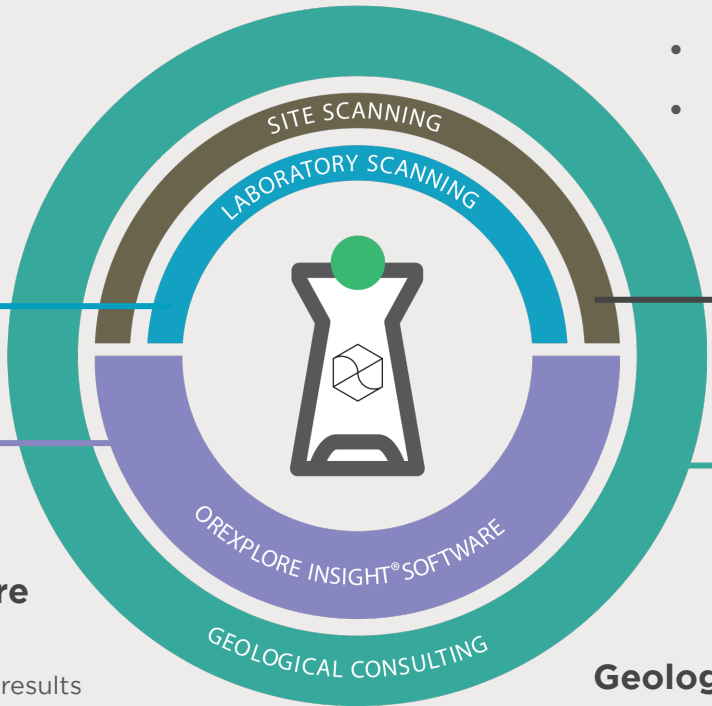


## Laboratory Scanning

- Core transported to Perth or Stockholm laboratories
- Typically lower volumes of several metres to 1,000 metres per engagement
- Small or short-term customers / projects
- Value Proposition development with clients

## Site Scanning

- Machine transported to customer site
- Medium to high volumes of over 1500 metres per month (resolution dependent)
- Larger customers with machines embedded into site workflows
- Continuous rapid scanning (dependent on drilled to presented-to-machine timeline)



## Orexplre Insight® Software

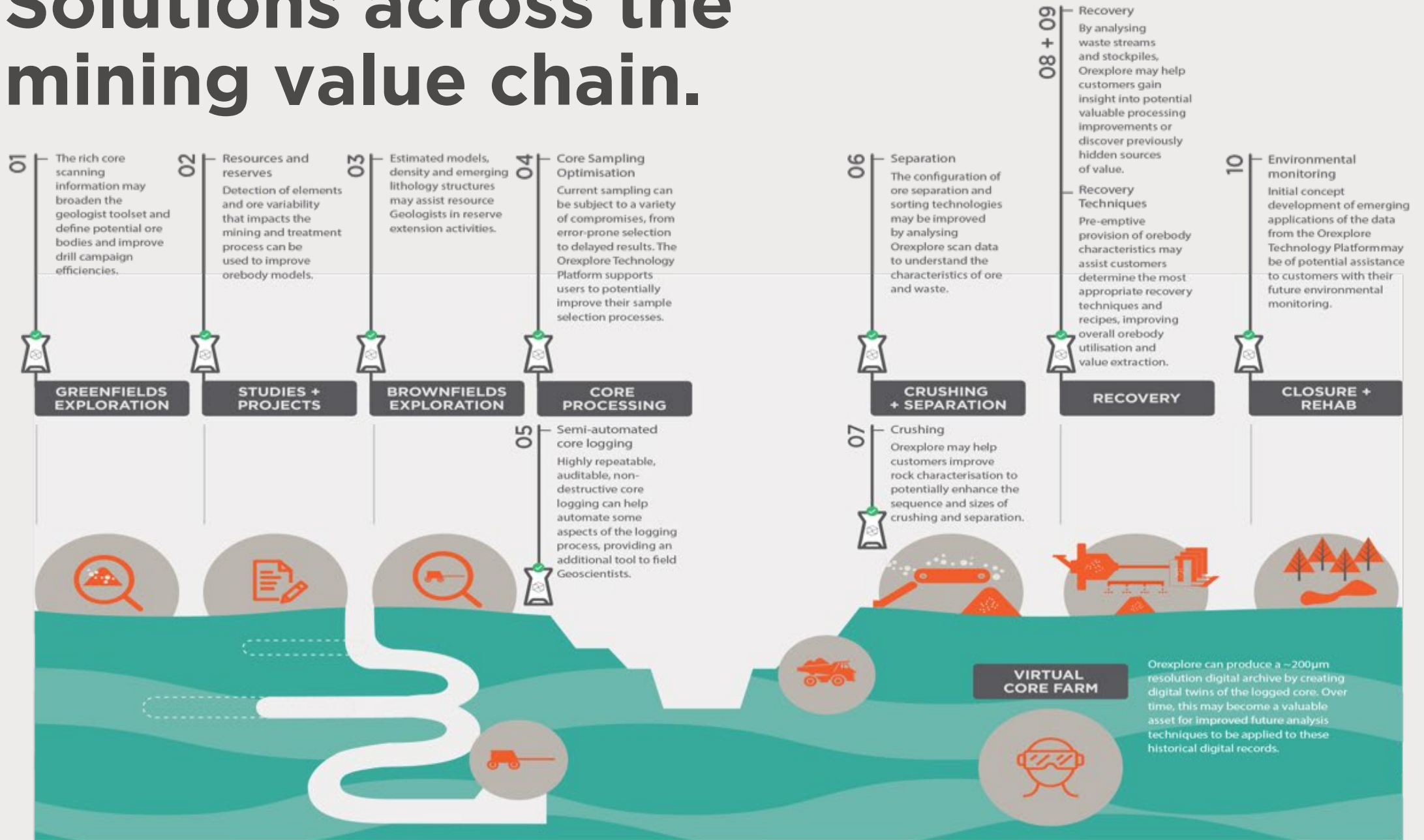
- User interface platform
- Visualises easy-to-interpret scan results
- Enables remote personnel to review data
- Supports the analysis of structures, faults, fractures, fabric, density and lithology
- Illustrates detected elements and emerging 3D modelled geochemistry

## Geological Consulting

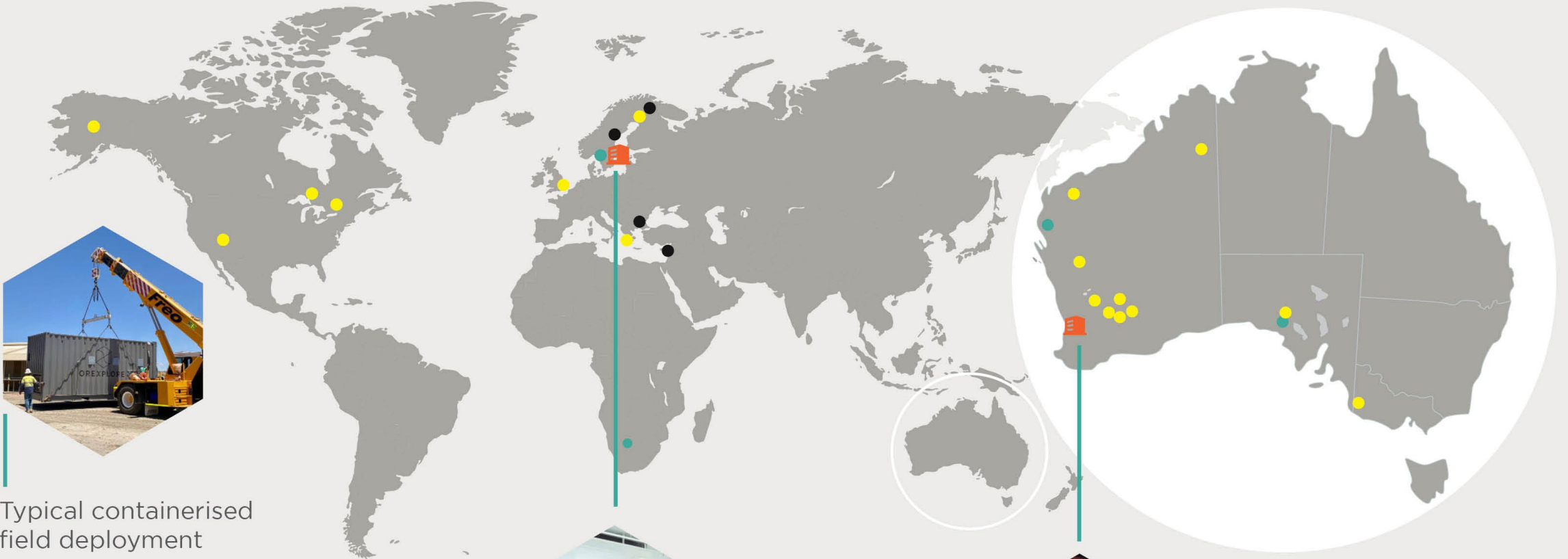
- Supports clients in integration of solutions in workflow
- Supports clients in data analysis & interpretation
- Identifies and develops new Value Propositions



# Solutions across the mining value chain.



# Traction.



Typical containerised field deployment

 Orexplre offices  
**CURRENT AND PREVIOUS CUSTOMERS**

-  Gold
-  Base Metals
-  Other Metals



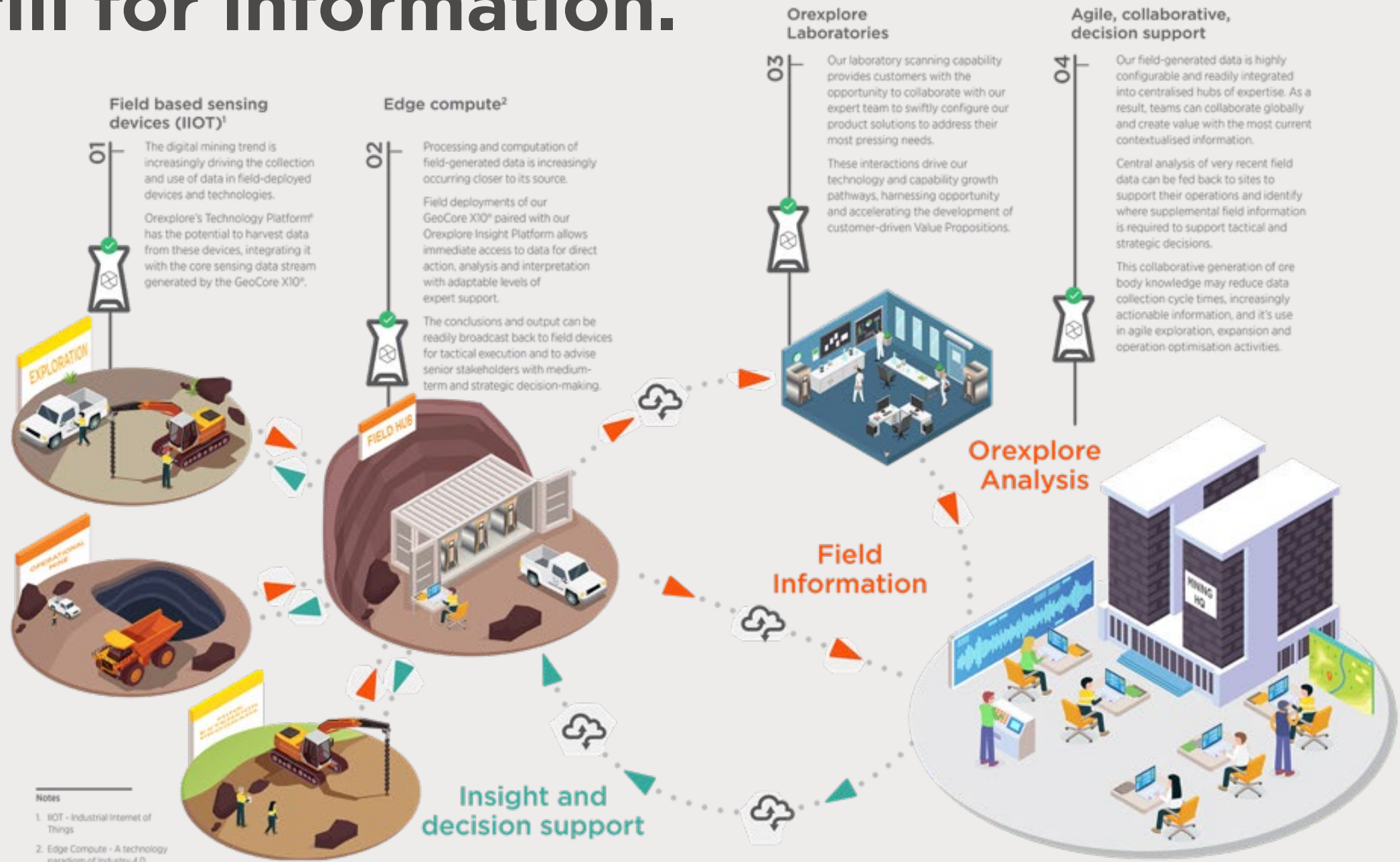
State-of-the-art research and production facility in Stockholm, Sweden



Australia Laboratory and Corporate HQ in Perth, WA

Representative sample of core source locations used in historical laboratory scanning

# Drill for information.



**Notes**

- 1. IIOT - Industrial Internet of Things
- 2. Edge Compute - A technology paradigm of Industry 4.0