



OREXPLORE
TECHNOLOGIES

Annual General Meeting

30th May 2023

Perth | Santiago | Stockholm





Disclaimer

About Orexplore Technologies

Orexplore Technologies Limited (ASX: **OXT**) is a globally focused mineral technology business concentrating on advancing the commercialisation of its Technology Platform across the mining value chain within the global metals and mining sector. The Company's Technology Platform consists of the GeoCore GX10® hardware product and Orexplore Insight user interface software, that is continually advancing through its in-house multi-disciplinary research and development team based in Stockholm, Sweden.

Orexplore's first product, the GeoCore X10®, is a transportable X-ray rock mass scanning technology that converts drill core samples into a three-dimensional data set to provide a "through the rock" image of internal structures and texture in addition to elemental detections, and density.

The Company maintains core-scanning laboratories in Stockholm, Perth, and Santiago. Orexplore's talented global team includes consulting geologists, engineers, data scientists and physicists, and technology delivery experts. The Company continues to advance its solutions through development and delivery of customer solutions powered by its Technology Platform.

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Disclaimer

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Unless otherwise stated all the currency disclosures in this presentation are Australian Dollars.

The information included in this presentation is dated 29th May 2023.



Who we are.

A diverse and global team of people empowering our customers to navigate global transitions via the transformational core scanning GeoCore® technology platform.

We believe in the sustainable extraction of minerals and metals creating value for all stakeholders to power a better world now and into the future.

We are...

300+

YEARS EXPERIENCE
ACROSS THE MINING
VALUE CHAIN

3

CONTINENTS

25+

EXPLORERS, GEOLOGISTS, PHYSICISTS, DATA
SCIENTISTS, ENGINEERS, MATHEMATICIANS

ASX:
OXT



Corporate Structure | ASX: OXT

Well positioned to accelerate solution adoption across a growing customer footprint.

Capital Structure

Shares on issue
103,664,196

Performance rights
8,293,136

Share Price (29.05.23)
\$0.060

Market Cap (29.05.23)
A\$6.21m

Q1FY23 Revenue
~A\$821k

Cash position (31.03.22)
~A\$4.79m

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

William Randall
Non-Executive Director

Frank Campagna
Company Secretary

Top Shareholders¹

Circle 5 Management Pty Ltd.

19.00%

Kent Jason Swick

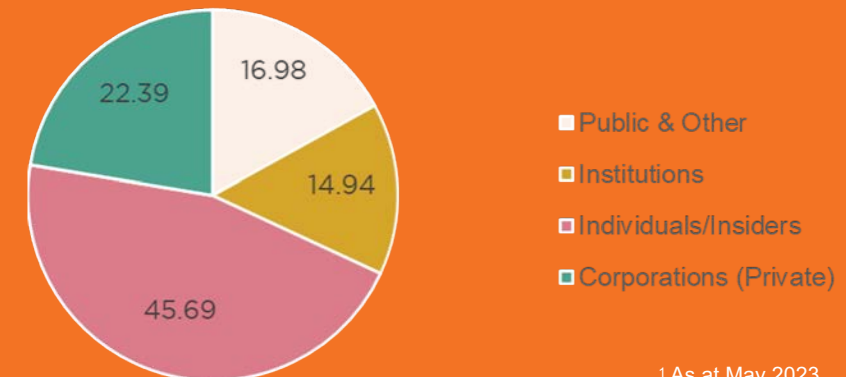
16.00%

Castle Point Funds Management Ltd.

8.56%

% Shares on Issue

Shareholder Structure



¹ As at May 2023
Source: S&P Capital IQ





Brett Giroud
Managing Director

2022 review



“

2022 was our year of traction – landing our largest ever contract and driving solutions in the field with our customers.





2022



Traction – \$2.35m OZ Minerals (now BHP).

Revenue – \$1.2m - commercial field deployments and OXT laboratory scanning.

Sales – growing global pipeline across geographies, metals and customers.

Adoption – tier 1 and other mining companies actively adopting..

Laboratories – developing the solution suite through commercial engagements.

Operations – safely scanning 24/7 in the field on commercial deployments.

Financial discipline – robust financial management.



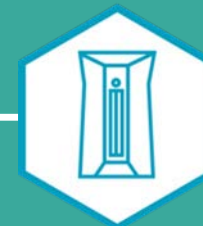
Solutions.

Data science team – transforming field sensed geology to produce data products powering solutions across the value chain.

Customer driven – software solutions developed through rapid collaboration.

Demonstrated value – of new-to-industry solutions through case studies.

Prioritisation – focused on tier-1 opportunities and resalable solutions.



Technology.

CX10® – dual energy capability unlocking critical minerals solutions.

Insight® – quarterly releases of customer driven functionality.

Support – engineering and maintenance to ensure seamless field deployments and operations.

R&D – next generation sensor developments and future horizons.





**Think & Act
Differently**



“Orexplora is delivering truly transformational building blocks for our business as we change the way deposits are sensed and deliver data-driven process design.”

Brett Triffett – OZ Minerals



Operating 24/7.

OZ Minerals

(now BHP).

Operating in a harsh and remote environment, the Orexplore team and technology platform is safely scanning drill core 24 hours a day, 7 days a week for OZ Minerals.

Using remote satellite links, the team has connected the rapid field scanning to the accelerated study team, who transform the data streams into valuable information that is integrated into standard OZ Minerals geological packages.

This first major field-deployment for the business has been pivotal to build operational capability and capacity and refine Orexplore’s solution delivery model in preparation for scaling.



Recent Progress. Technology.

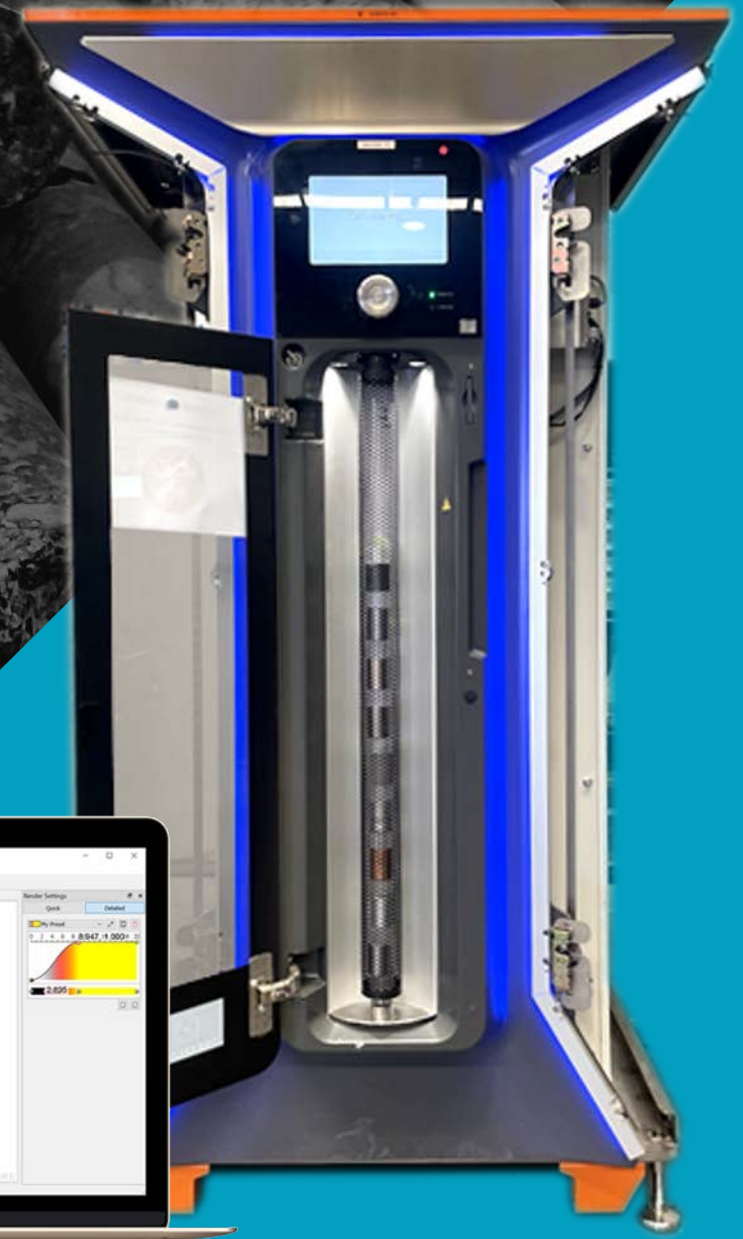
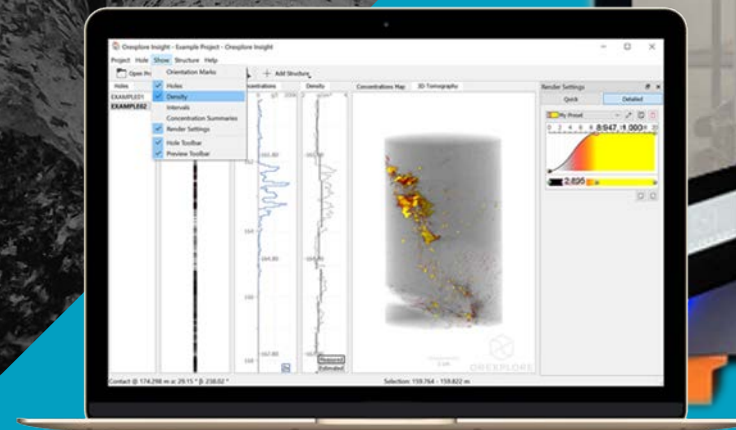
HQ machine – now scanning up to HQ core size – circa 40% serviceable market increase.

Dual Energy CT – a step change in the power of the results from the CT scanner, unlocking in-field ore sorting solutions for critical minerals customers.

Core engine – major advances in the digital core models driving rapidly improving near-real-time elemental and mineralogical outputs direct from the field.

Orexplre Insight® – customer driven quarterly releases of new functionality.

Future horizons – advancing in-house designed next generation sensors.





Increasing Market.



South America



Australia



Europe



- Gold
- Base metals
- Other metals

RRR

OBK

SDM

OVX

RQD

Building solutions.

Maximising deposit value.

Auto RQD (rock quality designation) – linking structures to processing options.

Smart domains – supplementing traditional grade models and challenging established block model boundaries.

Digital test proxies – expanding limited slow and expensive test work across ore bodies.

Density – high resolution automatic density reducing the inherent risk of “tonnes in the ground”.

Recoverability – particles, elements, mineralogy and more driving optimised process options to maximise recoverability and study techno-economics.



“We are building brand new solutions for the Industry - fed directly from near-real-time field sensed data and connected directly to a rapid study team”

Stephen Coward – Principal Geoscientist Orexplore

ENVIRO
COPPER
THE INVISIBLE MINE



Think & Act
Differently

OZ
MINERALS

OBK - Orebody Knowledge RRR - Resource to Reserve Risk (Reduction) SDM - Smart Domaining OVX - Orebody Value Extraction RQD - Auto rock quality designation



Brett Giroud
Managing Director

2023 progress



“

Our solutions are now rapidly advancing and starting to be pulled into regions by our customers.





South American market entry

- Oreplore enters the South American market with its first commercial field deployment in the region to Gold Field's Salares Norte mine.
- Establishing a Santiago office to receive core from a growing regional pipeline of Tier 1 and other customers.

SALARES NORTE



PARAGUAY

URUGUAY

ARGENTINA

CHILE



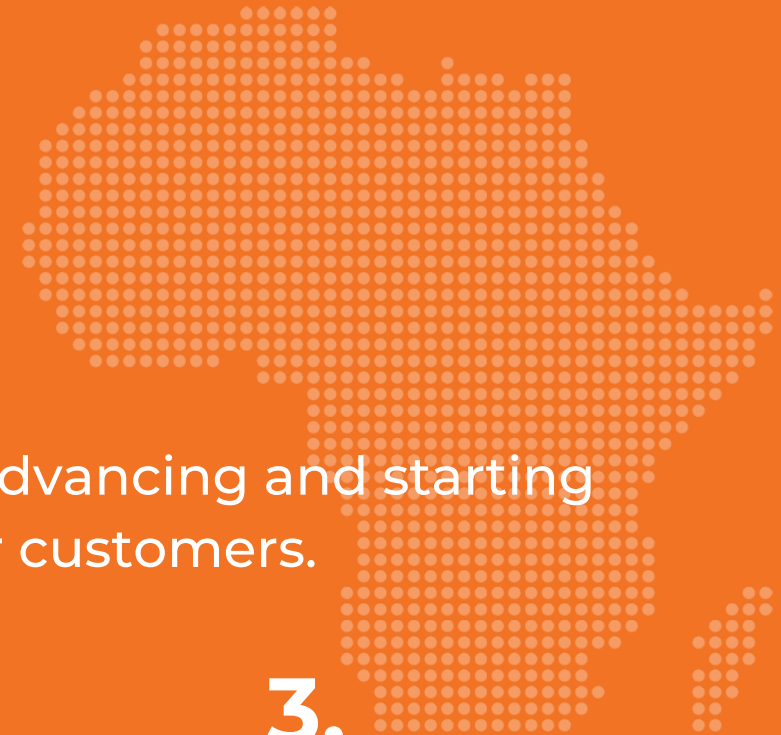


Pipeline.

The road ahead.



Our solutions are now rapidly advancing and starting to be pulled into regions by our customers.



1.

Americas

Entering South America and accelerating pipeline flow

- Gold Fields Chile
- Chilean & Argentinian Tier-1 miners - deep engagement and opportunity scoping
- Initial core scanning for potential customers commencing in Santiago office

2.

Australia

Accelerating sales outreach and attacking Critical Minerals

- Multiple Tier-1 and other operators scanning core in OXT laboratories and validating solutions
- Multiple Critical Minerals customers scanning in laboratories - developing new industry solutions
- Leveraging solutions from OZ Minerals project

3.

Africa, Europe

Responding to customer pull and defining the pipe

- Deep engagement post commercial lab trials with Tier-1 on African sites
- Deep engagement post initial commercial lab trials with European customer
- European customer commercial lab trials
- Early North American partnering out-reach



2023 strategic priorities

Driving adoption - rapid field-based adoption of a maturing solution suite across a geographically diverse base of tier-1 and other customers.

Team with technology - continuing to build an excellent team able to win contracts and deliver transformational value to customers to accelerate their own internal uptake.

Revenue - advancing the pipeline and accelerating the sales funnel to drive revenue generation, through annual recurring revenue style contracts.

Commercialisation - remaining laser focused on commercialisation, robust financial management and strategic positioning in the Industry.



Scaling

- Globally through key customers
- Revenue increasing
- Organisational capability and capacity to support multiple regions and sites
- Considering scaling strategies



Sales

- South America conversions to projects and operations
- Australian critical minerals, base metals and gold
- Advancing European customer relationships
- Initial North America outreach



Solutions

- Rapid suite development
- Driving adoption in the field
- Industry and key customer requirements combined with new-to-industry capabilities



Technology

- Support of the growing GX10 fleet
- Advancing the functionality and performance of the platform
- R&D aligned to solutions
- Insight 2.0 planning



Key Investment Highlights.



Transformational technology

True 3D – CT scanner maps the entire 3D core volume, compared to typical surface only sensing

Non-destructive – drill and scan once to create digital twins for collaboration and future proofing

Fast in the field – results in an hour anywhere in the world

Human-Machine automation – Insight® platform enables machine learning powered analysis



Scaling



Contracts – Gold Fields, OZ Minerals, and 10+ commercial OXT laboratory engagements

Pipeline – accelerating across three global regions

Globally significant team – industry leaders delivering transformation

Hub and spoke – centralised geoscience and support meets simple remote scanning

Reliable, simple to operate – GeoCore X10® field units



Solutions adoption

Geoscience solutions – across the whole mining value chain

Solution suite – exploration, studies, operations, critical minerals, ESG

Solving industry pain points – structural, persistent opportunities

Creating customer value – as they navigate global transitions

Simple operation – with centralised remote support



Global growth markets

Critical minerals enabler – uniquely suited technology unlocking deposits and projects

Global transition enabler – digital, automation, workforce, ESG, energy

Macro-economic scenarios – creating value through the cycles

Large Total Available Market (TAM) – multiple commodities

Across the Mining Value Chain – exploration, studies, projects, operations and ESG





OREXPLORE
TECHNOLOGIES



Q&A



Fast

industry leading
Drilled to insight
remote analysis within 15mins



Mobile

exploring with you
Anywhere in the world
rapidly transportable containers



Sustainable

scan core
Transport information
save time, money and emissions

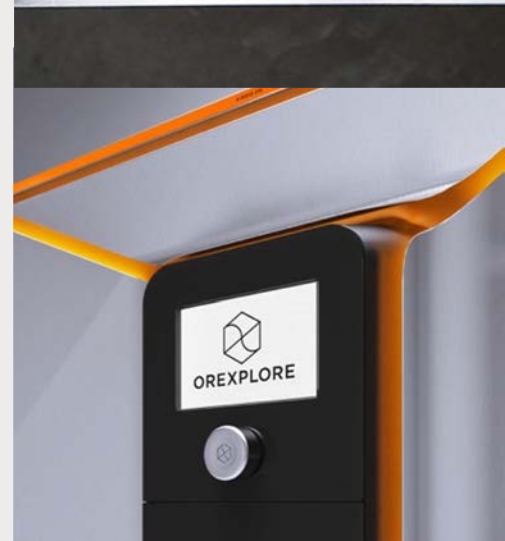
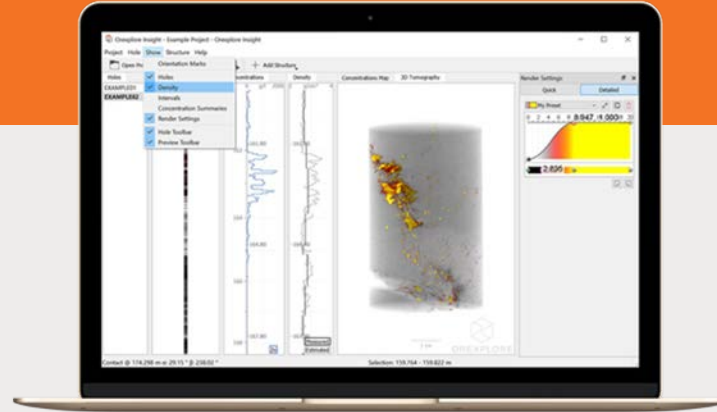




Appendix.



Technology offering.



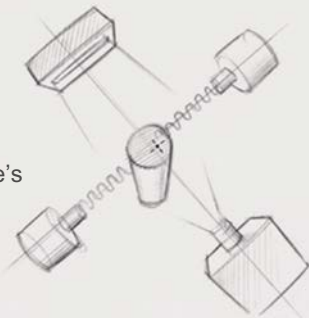
GeoCore X10 ®

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 allows for 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



Global mega trends.

Drive sustainable pain-points and opportunities across the mining value chain that guides the definition of the Orexplora solution suite



Digital Transformation

- Technology enabled business model evolution
- Productivity
- Industry 4.0



Metals Demand

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



Workforce Evolution

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



Sustainability

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



Business

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



Accelerating Value Chains

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



Automation

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



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

Brett Giroud – Managing Director



Mining transitions.

Sustainable pain-points are combined with transformational new solutions to guide the strategic focus of Orexplore



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





Drill for information.

Field based sensing devices (IIOT)¹

01 The digital mining trend is increasingly driving the collection and use of data in field-deployed devices and technologies.

Orexplore's Technology Platform[®] has the potential to harvest data from these devices, integrating it with the core sensing data stream generated by the GeoCore X10[®].



Edge compute²

02 Processing and computation of field-generated data is increasingly occurring closer to its source.

Field deployments of our GeoCore X10[®] paired with our Orexplore Insight Platform allows immediate access to data for direct action, analysis and interpretation with adaptable levels of expert support.

The conclusions and output can be readily broadcast back to field devices for tactical execution and to advise senior stakeholders with medium-term and strategic decision-making.



Orexplore Laboratories

03 Our laboratory scanning capability provides customers with the opportunity to collaborate with our expert team to swiftly configure our product solutions to address their most pressing needs.

These interactions drive our technology and capability growth pathways, harnessing opportunity and accelerating the development of customer-driven Value Propositions.



Agile, collaborative, decision support

04 Our field-generated data is highly configurable and readily integrated into centralised hubs of expertise. As a result, teams can collaborate globally and create value with the most current contextualised information.

Central analysis of very recent field data can be fed back to sites to support their operations and identify where supplemental field information is required to support tactical and strategic decisions.

This collaborative generation of ore body knowledge may reduce data collection cycle times, increasingly actionable information, and it's use in agile exploration, expansion and operation optimisation activities.

Orexplore Analysis



Field Information

Insight and decision support

Notes

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



Fast

industry leading
Drilled to insight
remote analysis within 15m



Mobile

exploring with you
Anywhere in the world
rapidly transportable containers



Sustainable

scan core
Transport information
save time, money and emissions

Technical 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 3rd party software.

Density

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

