

# Faster, more accurate **gold** analysis

### **Quarterly Investor Update**

25 October 2022

Dirk Treasure, Managing Director and CEO Brett Coventry, CFO



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# Q1 FY23: Financial and operating highlights



Q1 FY23 unaudited Total Revenue of \$5.1m, reflecting 9% growth on the previous Quarter



#### **Cash position**

- Operating cash-flow positive
- Continuing discussions with financiers for debt facility
- Well-funded to support PhotonAssay<sup>™</sup> unit growth

#### Contracted units<sup>1</sup>

- 10 units signed in the Quarter, total of 48 contracts
- Additional unit contracted to ALS in October
- Supports manufacturing expansion to 18 units/year

Two units deployed in the Quarter

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One additional deployment in October

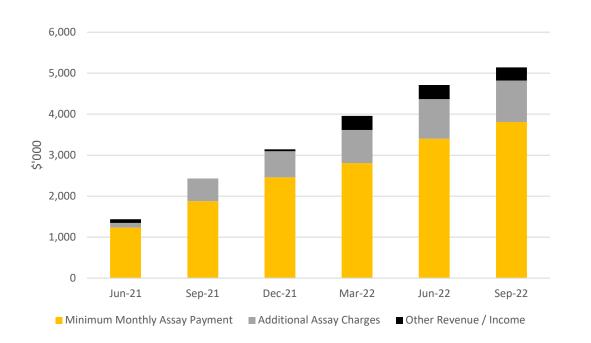
Continued growth of deployed unit base

## **Sustained revenue growth**

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New unit deployments and continued strong utilisation are driving revenue growth

### Unaudited MMAP, AAC & Other Income



Growth reflects the ongoing strong performance of deployed units and the installation of additional two units in Q1 FY23

- Minimum Monthly Assay Payments (MMAP) provide sustainable, forecastable minimum revenue
  - MMAP was \$3.8m, up 12% on Q4 FY22 (\$3.4m)
  - The 13 currently deployed units<sup>1</sup> provide a baseline MMAP of \$1.6m per month, or \$19m per year
- Additional Assay Charges (AAC) are continuing to increase supported by high utilisation
  - AAC was \$1.0m, up 5% on Q4 FY22 (\$0.97m)
  - AAC accounted for 20% of Q1FY23 Total Revenue
- MMAP and AAC revenue continue to increase in line with Chrysos' growing deployed unit base
- Other income reflects the provision of sample jars and lids to customers

## **Accelerating global deployment**

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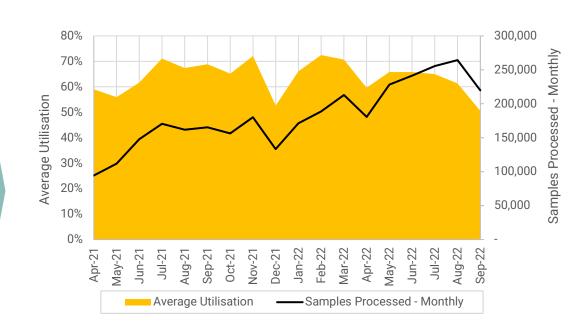
Strong and sustainable growth underpinned by long-term annuity-style recurring revenue

#### 13 Units Deployed<sup>1</sup>



Chrysos has grown its deployment capability to sustain three simultaneous installations

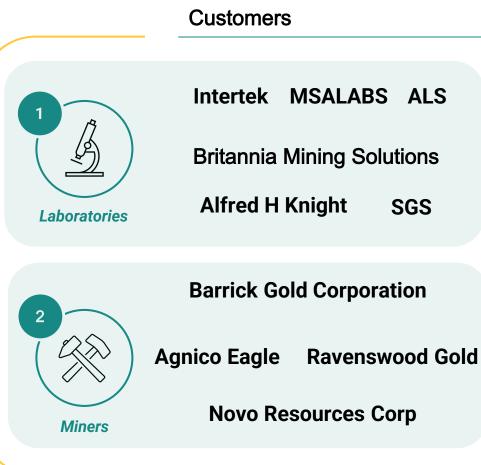
#### Average Unit Utilisation & Samples Processed



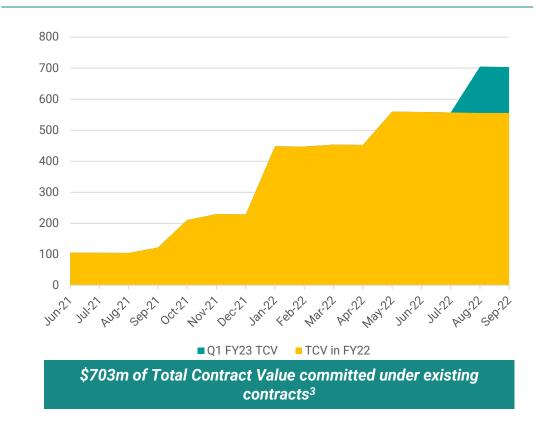
Average unit utilisation rate of 59%, with expected softening as newly-deployed units ramp-up to steady-state (prospectus forecast of 55%)

### **Step Change in Total Contract Value during Q1 FY23**

Ten new PhotonAssay<sup>™</sup> lease agreements signed during the Quarter



### Total Contract Value 1, 2



<sup>1</sup> TCV is calculated using foreign exchange rates of AUD:USD 0.73, AUD:CAD 0.94 and AUD:GBP 0.56. The USD and CAD rates are based on the average of the 3-month forward curve from Bloomberg in March 2022, per the Chrysos Prospectus and GBP rates are based on the average of the 3-month forward curve from Bloomberg in May 2022.

<sup>2</sup> TCV represents the future minimum contracted revenue on PhotonAssay leases (both deployed and committed) that are yet to be invoiced at a point in time, which are subject to the Company's contractual performance obligations and where the Directors consider reasonable certainty exists, may include values associated with exercise of option periods.

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<sup>3</sup> As at 30 September 2022

# In summary

Chrysos is well positioned to continue accelerating its global growth

- Strong and sustainable growth in Q1 FY23:
  - Quarterly record of 10 new PhotonAssay<sup>TM</sup> units leased
  - 14% QoQ increase in sample volumes
- 49 contracted units:
  - 13 currently deployed and generating revenue
  - Contracted unit deployments extending into 2025
- Manufacturing capacity on track to increase to 18 units/year in FY23
- Well-funded with \$82m cash in bank to support PhotonAssay<sup>TM</sup> unit growth
- Continuing discussions with financiers for debt facility to support further growth







# **About Chrysos**

### **Chrysos – revolutionising the global mining industry**



Chrysos is a global provider of novel assay services through its proprietary PhotonAssay<sup>™</sup> technology

### Disruptive Minerals Analysis Technology

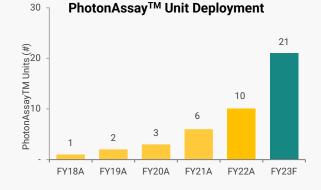
- Developed by CSIRO
- Faster process
- More accurate results
- Reduced sample preparation
- Automated operation
- Lower labour requirements
- Improved workplace OHS
- Better environmental outcomes
- Larger, more representative, sample size

Service and Lease Model with Tier 1 Counterparties

- Units operating commercially since 2018
- Deployed across 3 continents
- Over 3.5m commercial samples processed
- Secure Long-Term Revenue
- Unit deployments contracted out to 2025
- \$703m Total Contract Value
- Excess revenue via increased unit utilisation
- Annual Return on Invested Capital 47% 82%
- No known viable competitors

### Industry Accepted Technology Displacing Traditional Fire Assay

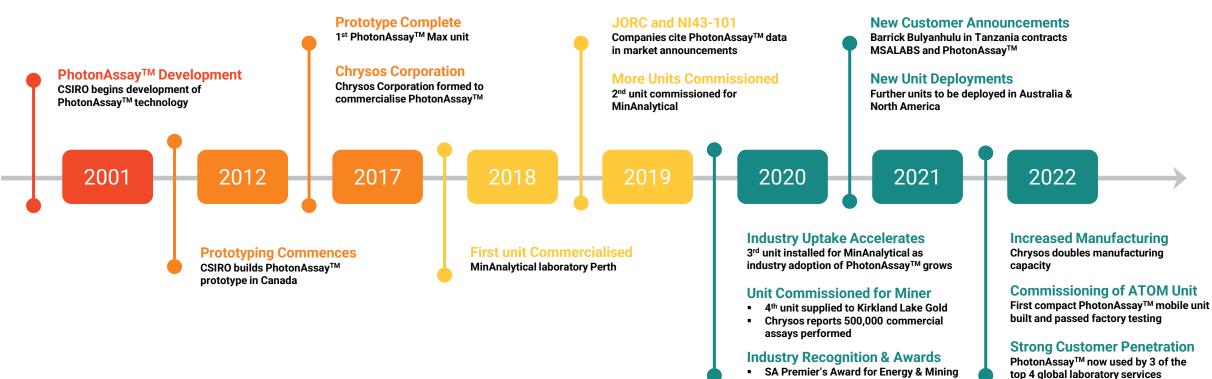
- Non-discretionary industry spend
- Total addressable market of 610 units globally
- Used in JORC and NI43-101, ISO17025
- Ability to analyse additional elements to gold
- Exponential growth supported by pre-contracted units



# **Our commercialisation journey**

#### The outcome of 20+ years of research and development





- SA Premier's Award for Energy & Mining productivity Improvement category
- KCA Award for Best Research . Commercialisation

providers (ALS, Intertek and SGS)

# **The Chrysos Vision**

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#### To become the world's leading provider of innovative assay services and technologies



#### Market Challenge:

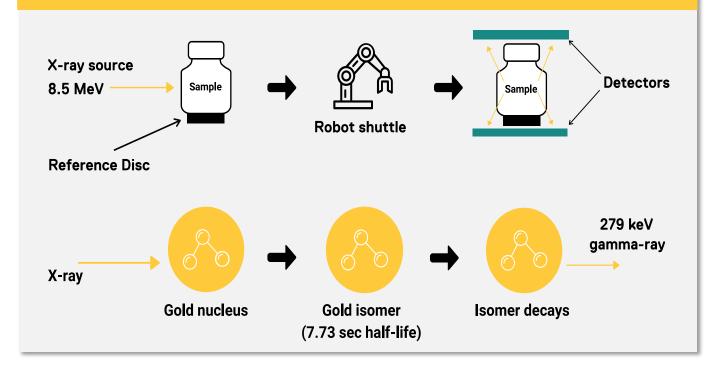
Traditional assay techniques are slow, labour intensive, complex, destructive to the assay sample, and involve dangerously high temperatures and toxic chemicals that are hazardous to both operators and the environment.



#### The Solution: Chrysos PhotonAssay<sup>™</sup>

- ✓ Provides **faster and more accurate** assaying
- ✓ Allows real-time delivery of information to support agile decision making
- Rapid decision making helps to improve operational efficiency, recovery and profitability
- Removes hazardous chemicals from the assay process protecting operators and reducing emissions
- ✓ Is non-destructive allowing for repeat testing and comparative analysis
- ✓ The process is **largely automated**, reducing labour requirements and the chance of human error

Fully-quantitative analysis in as little as 2 minutes!



# PhotonAssay<sup>™</sup> technology

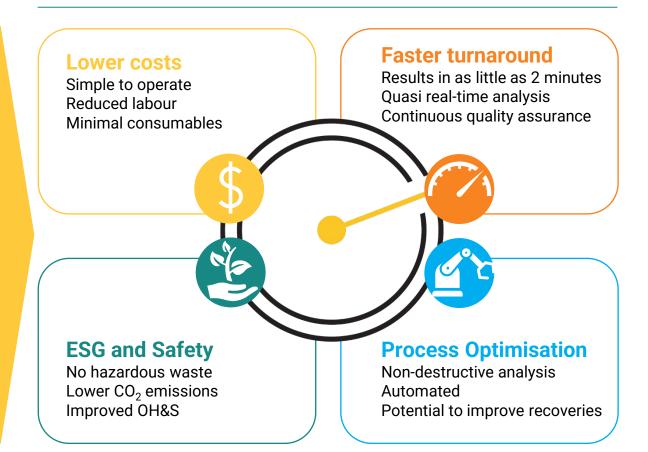
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Best in class gold assaying with measurable benefits over traditionally used methods

### PhotonAssay<sup>™</sup> vs. Traditional Fire Assay<sup>1</sup>

	Fire Assay	PhotonAssay <sup>™</sup>
Time per sample <sup>2</sup>	~3-4 hours	~2-3 minutes 🗸
Sample size	10-50 grams	250-650 grams
CO <sub>2</sub> per sample	0.91kg	0.455kg 🗸
Hazardous waste per sample	0.31kg	0kg 🗸
Energy use per sample <sup>3</sup>	1.3kWh	0.65kWh 🗸
Automation	×	$\checkmark$

### PhotonAssay<sup>™</sup> value proposition



1. Comparison of PhotonAssay<sup>™</sup> and fire assay per Frost & Sullivan industry report

2. Fire assay shown based on the minimum processing time. 24-hours is generally considered rapid turn-around time in practice.

3. Assumes same electricity source is used

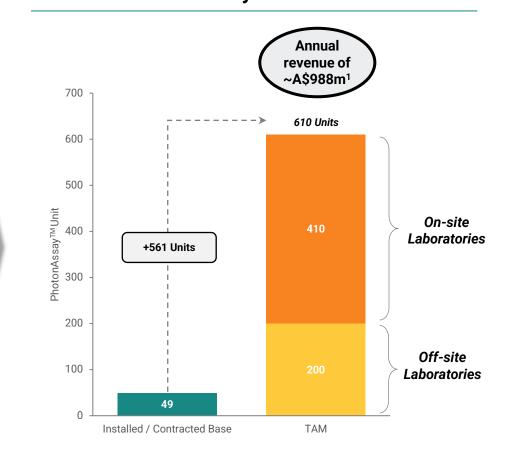
# **Large & unpenetrated TAM**

Assay expenditure is a non-discretionary operating cost

### Existing PhotonAssay<sup>™</sup> Reach



### TAM for PhotonAssay<sup>™</sup> Units



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# **Delivering tangible benefits for miners**

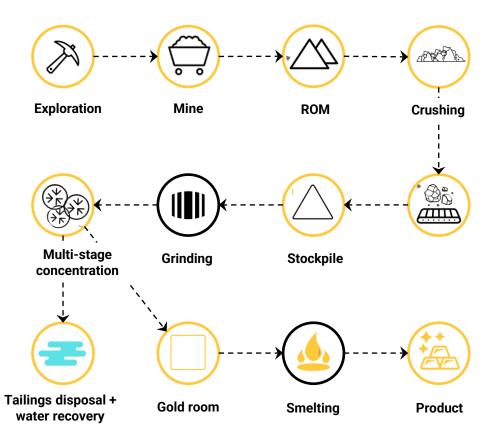


PhotonAssay<sup>™</sup> enables timely decision making and additional gold recovery

#### The opportunity...

#### PhotonAssay<sup>™</sup> is embedded in the mining value chain

- Each year global miners are estimated to lose >\$2.0 billion worth of recoverable gold
- PhotonAssay<sup>TM</sup> provides miners with access to real-time data, helping to improve decision making through the value chain
- Enabling the optimisation of processes to generate potential productivity gains



PhotonAssay <sup>™</sup> Value Add		
Exploration Mine	Fast turnaround for mine planning and scheduling in-pit	
ROM Crushing	Assay-supported blending between pit & processing	
Stockpile	Stockpile sampling & optimised gold recovery	
Multi-stage concentration	Reduction in process reagents & consumables	
Tailings + Water recovery	Tailings grade monitoring	
Gold room	All samples retained for QA/QC	
Product	Buyer / seller assays	



Denotes PhotonAssay  ${}^{\rm TM}$  value add

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# An environmentally-friendly solution

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Substantially better for the environment and significantly safer than fire assay

PhotonAssay<sup>™</sup> has a substantial **positive environmental impact** that will continue to grow in tandem with the uptake of the technology

- ✓ PhotonAssay<sup>™</sup> reduces CO<sub>2</sub> emissions and eliminates leadcontaminated waste
- ✓ Quantifiable benefit
  - 0.455kg of CO<sub>2</sub> reduced per sample (compared to fire assay)
  - 0.31kg of hazardous lead-contaminated waste reduced per sample (compared to fire assay)
- Improved OH&S through the elimination of hazardous chemicals, lead exposure, and ultra-high temperatures used in conventional fire assay
  - Fire assayers require routine blood tests to confirm acceptable levels of lead
  - Fire assayers are routinely rotated through other laboratory tasks to prevent a build-up of lead

### LIKE TO TREAD MORE LIGHTLY ON THE PLANET?

Every sample analysed with PhotonAssay means reduced CO2 emissions and less hazardous waste. To date, we have achieved:

2063.41 tonnes Reduced CO2 emissions

1390.56 tonnes

Hazardous waste reduction

As at 22 October 2022

# **High barriers to entry**

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High barriers to entry supported by global IP rights

#### Long-term leases with Protected by global <u></u> −× guaranteed minimums, **IP rights** TAN embedded at customer site 20+ years of R&D and Superior product to the investment in technology alternative Attractive value proposition **First-mover** (1st) for customers market advantage

**Barriers to competitive entry** 

# **Clear growth pathway**

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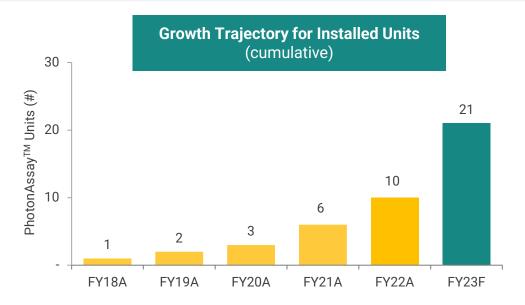
Clear organic growth plan with potential to expand TAM through additional commodities

### **Business development pipeline**

Global networks of laboratories

### Intertek ALS SGS MSALABS

- PhotonAssay<sup>™</sup> unit commitments extend out to 2025
- Existing customers offer additional deployment opportunities



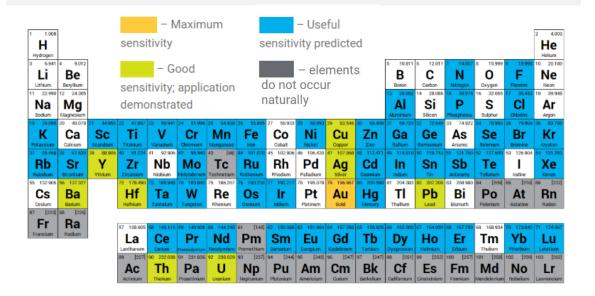
#### Multi-commodity assaying

#### Potential to expand TAM

- Base metals
- Energy metals
- Electronics recycling

#### Potential to increase profitability

- Add-on analyses
- Concurrent moisture



# **Experienced leadership team**

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#### Supported by a well respected and tenured board

#### Senior leadership team



#### Dirk Treasure Founding CEO & Managing Director

- Metallurgist with a background in both technical and commercial mining aspects spanning 15 years in the industry
- 7 years in novel metallurgical process development and commercialisation prior to becoming Chrysos' founding CEO



#### Rob Adamson

#### Founder & Chairman

- 20+ years' experience in mining and finance
- Executive Chairman of RFC Ambrian

#### Kerry Gleeson

#### Director

- Experienced executive and nonexecutive director in mining and associated industries
- Qualified Australian and English Lawyer: M&A, debt & equity funding & commercialising technology



#### Brett Coventry Chief Financial Officer

- Experienced in taking high growth technology start-ups from inception through to maturity
- 20 years in various roles encompassing international expansion, capital raising and listing through IPO



#### Brett Boynton Founding Director

- Co-founder of AI data analytics business and founder of London listed gold exploration technology co.
- 20+ years' investment banking experience in London, New York, Sydney



#### Eric Ford Director

40 years of strategic, management, commercial, operating and engineering experience in resources and energy



#### Ivan Mellado

#### **Founding Director**

- 20 years' experience in technology commercialisation and development ventures
- Business and Law qualifications; experienced executive and NED

# Thank you

For more information, please visit chrysoscorp.com or contact us at investors@chrysoscorp.com

