

Chrysos Corporation Ltd

Delivering faster, more accurate gold analysis

Chrysos Corporation Ltd (ASX:C79) is a rapidly growing provider of assay services to the global mining industry through its exclusive ownership of the CSIRO-developed PhotonAssay[™] technology. PhotonAssay[™] is a quantitative, chemical-free assay solution which can be used to detect a wide-range of elements and is particularly effective for gold. It displaces the centuries-old process of fire assay which involves the use of extreme heat, chemical re-agents, and human intervention. Fire assay is destructive to the ore and produces toxic waste in the process. In contrast, PhotonAssay[™] uses high-energy X-rays to activate the elements in mineral samples and from the emitted gamma radiation measures the amount of metal in the sample. The process is non-destructive, allowing samples to be retained for re-testing, uses less energy and has proven to be more accurate particularly in the context of complex mineralogy. Chrysos listed on the ASX on 6 May 2022, raising \$183.5m at \$6.50/share. The IPO provided a realisation event for some early-stage investors and raised \$65m in new capital for the company's growth plans. CSIRO remains the company's largest shareholder with a 22% stake. The company counts as clients major testing, inspection and certification laboratories, whose own customers include some of the world's biggest miners such as Barrick Gold and Agnico Eagle.

Business model

The Chrysos PhotonAssayTM units are typically leased on a five-year basis, with a five-year option to extend. The company outsources much of the manufacturing and assembly, plus a portion of the unit maintenance to specialist global security manufacturer, Nuctech. Chrysos retains full oversight and responsibility for the assembly of the system "smarts" to ensure protection of its IP. The lease agreements work on a minimum monthly assay payment which essentially sets a specified rate per assay multiplied by a minimum utilisation each month. Customers pay for any additional assays above the minimum commitment. The units are leased by miners and independent laboratories around the world. As at 11 August, the company had more than \$705 m in total contract value committed via 48 lease contracts. The company estimates there are more than 600 laboratories around the world analysing ore samples for the metals sector and these represent Chrysos' market opportunity.

FY22 results beat prospectus forecasts

Chrsysos reported its first results to the market and beat prospectus with FY22 proforma EBITDA of \$1.45m. Prospectus forecast for FY22 EBITDA was \$0.925m. FY22 reported revenue of \$14.3m was 3.8% up on the prospectus forecast for \$13.7m. The company noted in its FY22 presentation that it was on track to meet its FY23 prospectus target for revenue of \$26.6m and EBITDA of \$3.2m.

Look to peers which deliver ESG solutions to miners

We would look to peers which deliver ESG solutions to mining companies. ASX-listed ESG mining software group K2fly (ASX:K2F) also services the larger mining companies with long-term enterprise contracts for its technology and reports TCV.

Historical earnings and ratios (in A\$m unless otherwise stated)

Year end	TCV	Revenue	EBITDA adj.*	NPAT adj.*	NPAT rep.	EPS adj.* (c)	EV/Sales (x)	EV/EBITDA (x)	EV/TCV (x)
06/20a	n.a	2.532	(0.19)	(2.45)	(2.45)	n.a	n.a	n.a	n.a
06/21a	n.a	4.468	(0.69)	(3.44)	(3.44)	n.a	n.a	n.a	n.a
06/22a	558.5	13.687	1.452	(1.563)	(3.94)	(1.7)	14.1	132.5	0.27

Source: Company data; *EBITDA, NPAT and EPS adjusted for one-time, non-cash items and based on proforma numbers; NPAT reported is the statutory result; TCV = Total Contract Value

Mining Support Services & Equipment

9th September 2022



Upside Case

\$2.00

- Tailwinds in demand for gold
- Displacing a toxic and wasteful process
- Over \$700m committed in long-term contracts

Downside Case

- Reliant on third parties for components
- Patents could be breached
- Reliant on Nuctech for machine maintenance

Catalysts

- Delivery of prospectus forecasts for FY23
- Continued expansion of total contract value

Comparable Companies (Aust/NZ)

K2fly (ASX:K2F)

Board and Management

Rob Adams	on	Non-Exec. Chair
Dirk Treasu	re	Managing Director/CEO
Kerry Glees	son	Non-Exec. Director
Brett Boynt	on	Non-Exec. Director
Eric Ford		Non-Exec. Director
Ivan Mellad	0	Non-Exec. Director
Dr Leong M	lar	Non-Exec. Director
Brett Cover	ntry	CFO/Joint Co.Sec.

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FINANCIAL SERVICES GUIDE

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of

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AFSL 456663

Effective Date: 6th May 2021



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- who we are
- our services
- how we transact with you
- how we are paid, and
- complaint processes

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 - Securities

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