# QMines Limited (ASX: QML): QMines identified several priority resource growth targets including Woods Shaft, Tracker3

BY ACE INVESTORS / 04 APRIL 2022



By Team Ace Investors

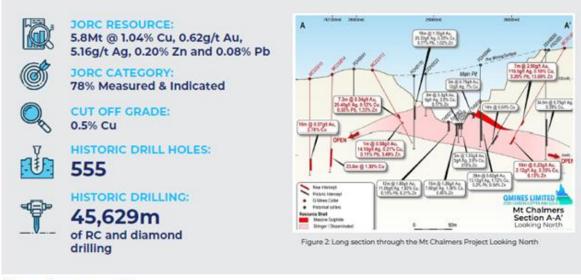
Stock Code	ASX: QML			
Shares O/S	113.67 million			
Closing Price	AUD 0.315			
Market Cap	32.96 million			
52 W H/L	0.665/0.230			
One Year Stock Performance	-			
Avg. Volume(TTM)	0.085 million			
EPS(TTM)	-0.086			
P/E	-			
Annual Dividend Yield	0.00%			
Franking	-			
Last Dividend Ex-Date	-			
Last Dividend Pay Date	-			
DPS (AUD)	-			
ROE (%)	-28.02%			

(Source: ASX)

#### **Company Overview**

QMines Limited ("QML" or the "Company") is a Queensland-based copper and gold exploration and development Company. The company has recently achieved carbon neutrality for its business operations under the Australian Government's voluntary Climate

Active Program and aims to be a zero-carbon copper and gold developer. The Company owns four advanced copper and gold projects in Queensland covering a total area of 1,096km<sup>2</sup>. The Company's flagship project, Mt. Chalmers is a high-grade historic mine that produced 1.2Mt@2.0%Cu,3.6g/t Au and 19g/t Ag between 1898 to 1982. The Mt. Chalmers Project is located 17km East of Rockhampton in Queensland. Since acquiring the project in December 2020, QMines has delivered two resource upgrades to the project. Mt. Chalmers now has a Measured, Indicated, and Inferred Resource (JORC 2012) of 101,000t contained copper equivalent @ 1.7% Cu Eq. Importantly, 78% of the Resource now falls under the Measured and Indicated JORC categories. QMines has embarked on an aggressive exploration strategy aimed at growing the resource and transitioning the mine back into production. The Company has published a further three near mine Exploration Targets (JORC 2012) at the Woods Shaft, Botos, and Mt Warminster prospects. These Exploration Targets sit outside the known Resource demonstrating further resource growth potential. QMines has also identified four large soil anomalies within the region that are of a similar scale and tenor to Mt Chalmers. QMines is currently undergoing a 30,000m drilling program focused on adding near mine resource extensions, converting Exploration Targets to resources, and testing several large soil anomalies and other priority targets



(Source: Company reports)

### **Investment Rationale**

## Mt. Chalmers increases Resources by 38% to 5.8Mt, with 78% now in the Measured & Indicated categories

QMines has recently released an upgraded Resource estimate at Mt Chalmers following its listing in May 2021, with Resources growing by 38% to 5.8Mt @ 1.7% CuEq for 101,000t contained copper equivalent. Importantly, 78% of the Resource now falls under the Measured and Indicated JORC categories. Mt. Chalmers now has a Measured, Indicated and Inferred Resource (JORC 2012) of 101,000t contained copper equivalent @ 1.7% Cu Eq. The new MRE at Mt Chalmers further strengthens the Company's view that Mt Chalmers has future development potential. The MRE is reported following the guidelines of the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC2012) with Resource estimate categories shown in Table1 and global Resource estimate by copper equivalent tonnes shown in Table2. The report included all historical and recent drill results delivered by the Company since its listing on ASX in May 2021. This estimate incorporates base and precious metals contained in the Mt Chalmers deposit including copper, gold, silver, lead, and zinc. The 2021 drilling program has successfully upgraded and increased the Resource at Mt Chalmers, with drill targeting focused mainly on peripheral footwall stringer zones. The Resource is divided into three mineralization types, namely Massive, Exhalite and Stringer and their oxide equivalents. The deposit has an overall strike length of approximately 700m north-south and an east-west extent ranging between 250m and 350m. There are zones up to 50m of thickness for the stringer zone and 5m to 20m for the massive sulphide domains. Mineralization is exposed in the pits and extends to a vertical depth of 200m below the surface. Extensional drilling will continue, based on the recent results, testing areas previously undrilled. The alteration halo appears to extend beyond the massive sulphide mound of the ore body, and historical drilling at Mt Chalmers does not appear to have fully tested the extensive strata-bound stringer zones in the footwall below and extending from, the historically mined sulphide mound. In addition, to drill testing the margins of the Mt Chalmers body, the Company is preparing to explore and drill test other VHMS targets within its tenement boundaries. Historical drilling and surface geochemical data have revealed several such targets of interest and work on these will begin in Q1-2022.

- QMines delivered a second Resource estimate at the Mt Chalmers following its listing in May 2021
- Resource increased by 38% to 5.8Mt @ 1.7% CuEq for 101,000t contained copper equivalent, with 78% in the Measured & Indicated categories;
- Several additional VHMS prospects have been identified outside the Resource demonstrating further growth potential; and
- Drilling continues unabated (+30,000m) with a third Resource upgrade planned for H1-2022

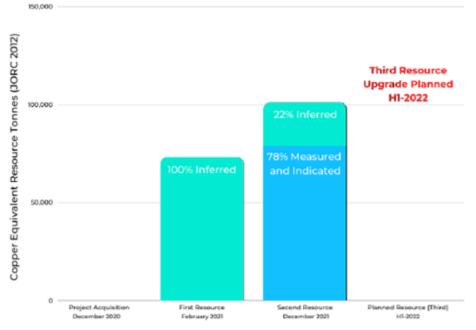


Figure 2: QMines Resource Upgrades Since Project Acquisition in December 2020.

#### **Copper Equivalent Tonnes**

Resource	Cut-Off	TONNE	Cu	Au	Zn	Ag	РЬ	Cu Eq	Cu Eq
Category	Cu (%)	Metric	(%)	g/t	(%)	g/t	(%)	(%)	t
Total	0.30	8,963,000	0.81	0.48	0.21	4.91	0.08	1.36	123,000
Total	0.50	5,845,000	1.04	0.62	0.20	5.16	0.08	1.70	101,000
Total	0.70	3,871,500	1.26	0.75	0.21	5.46	0.08	2.04	80,000

Table 2: Global Resource Estimate by Copper Equivalent Tonnes, November 2021. Note rounding errors may occur.

(Source: Company reports)

# QMines identified several priority resource growth targets including Woods Shaft, Tracker3

Following a successful 2021 drilling campaign, the company has identified several priority resource growth targets including Woods Shaft, Tracker3, Mt. Chalmers Mine, and Mt. Chalmers North. An Exploration Target (JORC2012) has been estimated for the Woods Shaft Prospect, 700m to the southwest of the Mt Chalmers Deposit. The Exploration Target is approximately 350m in strike length, 200m wide, and has not been fully tested. The current mineralization envelope extends from the surface to a depth of 90m in places and contains gold and base metals mineralization. The geology of the Woods Shaft Exploration Target (JORC2012) appears similar to that of the Mt Chalmers Main Lode. Importantly, Woods Shaft is not currently included in the Mt Chalmers Resource. As part of a six-month program

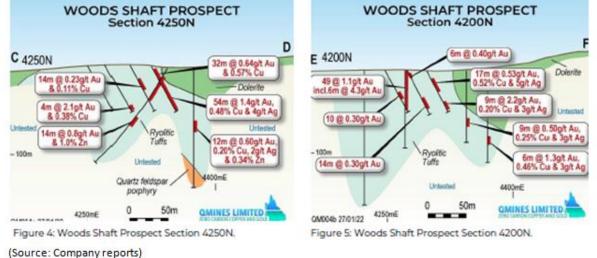
of digitizing and validating historical exploration data in 2021, the Company also identified several large soil anomalies including Tracker1, Tracker2, Tracker3, and Striker prospects that appear to have a similar geochemical signature to the Mt Chalmers deposit. QMines is now preparing for its maiden exploration program at Tracker3 following the approval of exploration license EPM 27726 covering Tracker3 by the Queensland Department of Resources. Following a significant amount of step-out drilling from the main resource in 2021, the Company is now investigating the potential for extensions to the mineralization system at depth. At the northern end of the Mt Chalmers mineralized envelope, there are several sporadic historical drill holes intersecting mineralization at depth. The Company intends to complete several drill lines where there is potential to extend the resource to the north of the main lode. To achieve this, QMines has purchased an RC drill rig and support trucks and established a significant base of operations at Mt Chalmers. This will allow the effective use of renewable fuels for future drilling operations. With costs and inflation rising and drilling being the largest annual expense to the Company, there is also a strong economic rationale for this purchase. The Company believes that this acquisition will go a long way to reduce these cost pressures and maximize the efficient use of capital. The fully kitted-out rig and associated support trucks will have the capacity to drill over 250m in depth. The company paid a total consideration of \$1million in cash for the equipment and \$600k in QMines shares. With a third Resource update planned for H1-2022, QMines expects to deliver shareholders significant leverage to a growing resource and exploration success

Hole ID	Hole Type	North	East	Declination	Azimuth	M from	M to	Int (m)	Au (g/t)	Ag (g/t)	Cu (%)
P18	DC	4250	4321	-60°	90°	6	60	54	1,4	4	0.46
WSC2	RC	4200	4275	Vertical	-	0	49	49	1.1		
	Including						37	6	43		
P21	DC	4400	4349	Vertical		27	48	21	1.7	5	0.42
P24	DC	4400	4372	Vertical		36	48	12	1.6	4	0.68
P17	DC	4200	4300	-60°	90°	48	57	9	2.2	3	0.20

#### Woods Shaft Significant Intersections<sup>1</sup>

Table 1: Woods Shaft Significant Intersections.

## Woods Shaft Cross Sections<sup>1</sup>



# Initial metallurgical test works indicate high recoveries from all concentrates

QMines recently announced excellent preliminary metallurgical test work results from an initial sighter study completed on its Mt Chalmers copper and gold project, located 17 km northeast of Rockhampton, Queensland. This metallurgical test work program was designed to establish a preliminary flowsheet and assess the ability to recover these metals into separate flotation concentrates. A total of two flotation tests have been conducted on the stringer composite core selection to date. All tests were conducted on 1kg batch flotation tests. Tests were conducted using Perth tap water at a primary grind size of P80 150 and 75µm. Results from tests on the two grind sizes showed that improved copper recovery was achieved from the finer grind composite. A composite of stringer mineralization with a head grade of 1.22% Cu, 0.2% Pb, 0.02% Zn, and 1.05g/t Au was subjected to two preliminary open circuit flotation tests. Sequential flotation was successful in producing a copper rougher concentrate. Rougher grades of up to 12.3% Cu and 4.6g/t Au were produced with excellent recoveries of 97.1% copper and less than 0.14% lead and zinc. These results were particularly encouraging as lithologically, the stringer mineralization makes up the bulk of the resource. A composite of massive sulphide (copper, lead, and zinc exhalite) with a head grade of 1.28% Cu, 1.42% Pb, 3.51% Zn, and 4.31g/t Au was subjected to ten preliminary open circuit flotation tests. Sequential flotation was successful in producing rougher concentrates of copper/lead and zinc. Rougher grades of up to 15.6% Cu, 15.1% Pb, and 16.6% Zn were produced with acceptable recoveries of 88.8% copper, 76.6% lead, and 83.6% zinc. Gold predominantly reported to the copper/lead concentrate, grading as high as 46.9g/t gold. There is an opportunity to further improve recoveries in subsequent testwork programs.

QMines recently completed the digitization of a large historical soil dataset covering the Company's Mt Chalmers Project. Since completing these works, the Company has focused on the Tracker3 prospect, where EPM27726 was recently granted by the Queensland Department of Natural Resources. Little exploration work was undertaken by Geopeko and other explorers over the Tracker3 prospect. No drilling has been completed over this large soil anomaly since 1969. The anomaly represents a near-mine exploration opportunity with deeper RC drilling programs currently being designed to test the large geochemical target at the Tracker3 prospect.

QMines' objective is to grow its Resource base, consolidate assets in the region and assess commercialization options. The Company has commenced an aggressive exploration program (+30,000m), providing shareholders with significant leverage to a growing Resource and exploration success. The current drilling program is designed to expand the resource model, with several step-out holes having been drilled on the western, southern, and eastern sides of the pits, outside current resource wireframes, with multiple RC pre-collars drilled ready to complete diamond tails. Importantly, the Company has drilled several holes in previously untested areas on the western side of the main pit and to the northwest of the west load. This area was targeted due to the lack of historical drilling by previous companies. Assay results are pending. The company is expected to release an upgraded Mineral Resource Estimate (MRE) in H1-2022. The company closed the quarter with a strong cash balance of \$5.57 million.

#### ACE's Recommendation

QMines Limited (ASX: QML) is a Queensland-based copper and gold exploration and development Company. QMines has recently released an upgraded Resource estimate at Mt Chalmers following its listing in May 2021, with Resources growing by 38% to 5.8Mt @ 1.7% CuEq for 101,000t contained copper equivalent. Importantly, 78% of the Resource now falls under the Measured and Indicated JORC categories. Mt. Chalmers now has a Measured, Indicated and Inferred Resource (JORC 2012) of 101,000t contained copper equivalent @ 1.7% Cu Eq. The new MRE at Mt Chalmers further strengthens the Company's view that Mt Chalmers has future development potential. QMines is currently undergoing a 30,000m drilling program focused on adding near mine resource extensions, converting Exploration Targets to resources, and testing several large soil anomalies and other priority targets. Following a successful 2021 drilling campaign, the company has identified several priority resource growth targets including Woods Shaft, Tracker3, Mt. Chalmers Mine, and Mt. Chalmers North. The Company also identified many large soil anomalies including Tracker1, Tracker2, Tracker3, and Striker prospects that appear to have a similar geochemical signature to the Mt Chalmers deposit. QMines is now preparing for its maiden exploration program at Tracker3 following the approval of exploration license EPM 27726 covering Tracker3 by the Queensland Department of Resources. The current drilling program was designed to expand the resource model, with several step-out holes having been drilled on the western, southern, and eastern sides of the pits, outside current resource wireframes; with multiple RC pre-collars drilled ready to complete diamond tails. The company is expected to release an upgraded Mineral Resource estimate in H1-2022. We believe that the upcoming MRE will be a key catalyst in the near term. The stock is now trading at the lower end of its 52-week range at A\$0.315/share and offers an attractive opportunity. So, we would like to recommend a **SPECULATIVE BUY** rating on the stock.

Disclaimer: Ace Investors Pty Ltd (ABN 70 637 702 188) authorized representative of Alpha Securities Pty Ltd (AFSL No.303575). Ace Investors has made all efforts to warrant the reliability and accuracy of the views and recommendations articulated in the reports published on its websites. Ace Investors research is based on the information known to us or which was obtained from various sources which we believed to be reliable and accurate to the best of its knowledge. Ace Investors provides only general financial information through its website, reports and newsletters without considering financial needs or investment objectives of any individual user. We strongly advocate that you seek advice, with your financial planner, advisor or stock broker, the merit of each recommendation before acting on any recommendation for their own specific financial circumstances and realize that not all investments will be suitable for all subscribers. To the scope permitted by law, Ace Investors Pty Ltd excludes all liability for any loss or damage arising from the use of this website and any information published (including any indirect or consequential loss, any data loss or data corruption). If the law prohibits this exclusion, Ace Investors Pty Ltd hereby limits its liability, to the scope permitted by law to resupply of the services. The securities and financial products we study and share information on, in our reports, may have a product disclosure statement or other offer document associated with them. You should obtain a copy of these before making any decision about acquiring any security or product. You can refer to our Financial Services Guide.