

Omico Mining Corp Ltd. Q1 2023 – Quarterly Report

May 2, 2023



Omico Mining Corp ("Omico"), the Namibian copper exploration and development company, is pleased to present its quarterly report for the period ending 31st March 2023.

The Company is advancing the Omitiomire Copper Project Bankable Feasibility Study (BFS) with anticipated completion in Q4 2023. As previously evidenced by internal economic and technical studies, there is significant potential for the project to be a viable long-life and low capital-intensive copper cathode producer in central Namibia.

Highlights of the period:

- Trip to Chile: in January, the project team and two of our consulting metallurgists travelled to Chile for technical workshops on chloride leaching and site visits to learn from the Glencore and Antofagasta heap leach experience;
- Economic and Social Impact Assessment (ESIA): Excellent progress on environmental baseline studies and reports, with the Company hosting two public participation meetings in March;
- Formation of a Peer Review Group and hiring an experienced Project Engineer;
- Completion of geotechnical drilling programme;
- Completion of the metallurgical tests at Mintek, South Africa;
- Mining study indicates a potentially longer mine life;
- Excellent progress in heap leach and acid supply trade-off studies;
- Delivery of the preliminary mine plan and ongoing optimisation of mine plan and ramp design;
- Conclusion of the river diversion phase 1 work and related geophysical assessment;
- Confirmation via geochemical tests that waste rock is barren and will not result in acid mine drainage that needs costly mitigation measures;
- Continuation of work related to power and water supply; and
- Craton Foundation & Corporate Social Responsibility.



Visit to Chile

Shortly after the seasonal break, the Omico CEO, Ingo Hofmaier, and project manager Mike Stuart, flew to Santiago together with two senior metallurgists from Omico's lead consultancy, Metc Engineering for eight days of workshops with MJO and EDF Ingenieros focusing on specific chloride heap leach design criteria. During the time in Chile, the project team and accompanying consultants were able to visit two heap leach operations: Glencore's Lomas Bayas, and Zaldivar operated by Antofagasta Minerals. In both cases the visiting group spent considerable time discussing respective operation's specific aspects related to hydrometallurgical set-up, including agglomeration, stacking and reclaiming, irrigation systems and continuous improvements via met-testing, aeration optimisation and water preservation. The visits and conversations targeting the heap leaching operations were rounded off with visits to the SX/EW plants.



Omico is immensely grateful to both Glencore and Antofagasta for making senior engineers available for a full day each, enabling the team to speak to individuals who have successfully executed and operated multiple copper mines using conventional and chloride heap leaching.

Chile has very large but lower grade orebodies with big oxide caps, many of which have been processed using heap leaching for decades. Antofagasta was instrumental in championing chloride leaching for sulphide orebodies that are high in chalcocite, similar to Omitiomire. In the last couple of years the following assets have produced a considerable amount of cathode using the chloride leaching route for sulphide copper mineralisation.





Namibian permitting process and Environmental and Social Impact Assessment

Public Participation meetings, designed to present the project to a wider audience of stakeholders, were successfully held on the 8th of February in Windhoek (at the Namibian Scientific Society) and on the 10th of February at a tourist lodge close to the project site to allow the widest possible participation of interested parties. The majority of attendees were local farmers, with additional representation from two local NGOs, media and the business community. The meetings began with a presentation from the Company's environmental consultants (ECC) on the Company's progress in attaining environmental approval and the potential input that Interested and Affected Parties (I&APS) can have in the process. This was followed by a presentation from the Company and the Namibian engineering consultants, on the project and its expected environmental impacts and proposed mitigation measures. The presentations were then followed by extensive, constructive and open discussions between management and the I&APS on their concerns and issues, particularly in relation to the impact on the environment and local businesses. Especially valuable were the discussions with local farmers and their feedback on the Company's proposals for the river diversion and other significant impacts to the local community. Issues raised are being incorporated into the Environmental and Social Impact Assessment (ESIA). Feedback from the meetings was positive, and the community has been pleased with the Company's engagement of Namibian consultants. The Company wants to maintain an open and on-going dialogue with its neighbours, including more regular meetings to update the community on the progress of the project outside of the prescribed process in Namibia. Omico aims to build a better understanding of its plans among local stakeholders and to respond to local concerns in a timely manner.

The Scoping Study and draft Environmental and Social Management Plan (ESMP) will be submitted to the registered I&APS for comment before submission to the relevant regulatory authorities. Stakeholders who missed the meetings can always get in touch with Omico's environmental consultancy and add their concerns to the list.





Various other studies such as biodiversity, heritage, water, noise pollution, air quality, traffic, and socio-economic standards to establish baseline data are being progressed for incorporation in the final ESIA, with substantial progress made over the quarter.

The final ESIA and Environmental Social Management Plan will be submitted to the relevant authorities in mid-2023 for the issuance of an environmental clearance certificate for mining and processing. The Mining Licence itself is already in place for the project and Omico and its local subsidiary have made the required submissions to the mining commissioner for the period January – March 2023 and with the mineral exploration being conducted on the wider exploration licence, Omico will easily fulfil its spending commitments for the on-going year.

Organisational developments

The quarter saw several major steps the organisations design of our organisation:

- The appointment of Mathys (Thys) du Preez as Project Engineer;
- The formation of a Peer Review Group of experienced technical professionals;
- Development of the organisational design for the build and operations phase; and
- Completion of an assessment of the compensation rates for the future site management, technical team and staff.

Mathias (Thys) du Preez has been appointed as Omico's project Engineer and brings extensive practical experience to the team in project design, planning, execution, operations and maintenance. He is an electrical and mechanical engineer and will be working closely with our main project engineers Metc Engineering, based in Johannesburg. With over 40 years' experience as project and site manager



across Africa, the Americas and Asia Pacific, including 15 years with Freeport, Glencore, and ERG on major copper projects. Notably, Thys spent eight years with Glencore as Engineering Manager (Projects and Process) in the DRC, and four years as Manager of Special Projects covering Glencore's global copper projects. His work with Glencore included the installation of seven Electro-Wining and five Solvent Extraction plants in the DRC, on time and budget. Other notable experience includes the design of 220k ton copper cathode plant in the DRC, and the design of a stacker reclaimer and heap leach system for the Lomas Bayas copper mine in Chile.

The Peer Review Group has been formed in order to provide the Company's controlling shareholder, Greenstone Resources, with an independent view on the robustness and adequacy of technical data, in addition to the resulting assumptions generated by the project team responsible for the Omitiomire Copper Project. The Peer Review Group will further provide independent technical advice to the project team, supporting project related decision making, testing ideas, and brainstorming value enhancing initiatives.

The initial members of the Peer Review Group will be Geoff Beale and Martin Errington. Alan Stephens, who is an existing member of the Project Steering Committee, will assist the Peer Review Group on all questions relating to the geology of the deposit.

Geoff Beale has worked for 44 years in surface and groundwater control, water resources management and water engineering, mostly for the aggregate and mining industry. He started work as a surface water hydrologist before joining the Aspinwall Group in 1980. He has worked in over 70 countries worldwide, in all major industrial commodities, and in all climatic zones. He has been seconded to management positions for several international mining operators. Geoff has worked on the full mining cycle at a number of operations: from planning, permitting, construction and operation, through to closure and reclamation. He has authored and presented many technical papers and has been a member of the Large Open Pit research group (LOP) since 2006.

Martin Errington is a chemical engineer with more than 40 years' experience in managing the successful design and delivery of projects in logistically and culturally challenging environments. He was the lead process engineer and project manager for various base metals projects around the world. Most notably Martin was a member of the Rio Tinto's Technical Management Team for over nine years. Work included overseeing work at Escondida as a member of joint owners Technical Committee, a position as project manager for the initial study on the La Granja copper heap leach SX/EW project and overseeing the commissioning of the Andacollo copper heap leach SX/EW project in Chile. Further to this Martin served as a technical advisor to Rossing for its uranium heap leach development project in Namibia. He is an innovative strategist who has successfully managed major projects covering copper, gold, uranium, and industrial minerals, with a focus on process engineering excellence.





The Company created its future organisational design, including key roles and an appropriate shift roaster, and with the help of local consultants priced the total guaranteed package – the future financial compensation for 79 positions covering four departments:

- 1. Management and Administration
- 2. Mining
- 3. Engineering
- 4. Technical Services

This human planning resource exercise will be used for the various operating cost planning exercises, the ESMP and submissions to the government, going forward.



Update on drilling programmes and exploration activities

In December 2022 a 54 hole, 7,192m RC infill drilling programme was completed on the project with the aim of increasing the confidence and convert the inferred material in the proposed pit shell to indicated.

The MSA Group, South Africa, (MSA) were responsible for managing the drilling programme and had up to three geologists on site during the drilling campaign. The QA/QC of the geochemical assaying at Actlabs has demonstrated that the accuracy and precision are of an acceptable standard. Results are outstanding for 3rd party umpire sampling. All assay results from the infill drilling programme have been received and incorporated into the database.

Significant drill hole intersections from the latest RC drilling are included in the table below. However, these are not representative of the deposit overall and are not adjusted for true-thickness.

Hole ID	From	То	Length	TCu%	
PRC011	150	200	50	0.99	
PRC015	161	168	7	1.31	
PRC017	121	126	5	1.33	
PRC018	167	190	23	1.35	
PRC032	188	201	13	2.05	
PRC040	210	215	5	1.77	

Currently MSA are updating the geological and wireframe modelling of the deposit and will then update the resource estimate accordingly. This updated resource estimate should be complete by May 2023.



In conjunction with the RC resource drilling the company undertook 1,415m of geotechnical diamond drilling in 8 holes, completing the drilling programme in January 2023. This programme was designed to complement the previous geotechnical drilling undertaken on the project and provide additional geotechnical information for pit wall slope and stability design. Core samples were collected and shipped to South Africa for test work and Middindi Geotechnical Consultants are currently undertaking the pit slope stability design and report. Results received from Middindi in early April confirm the assessment that the fresh rock is competent in both the foot- and hanging wall. Omico is therefore confident that the mining design can be improved via an increased slope angle and higher benches.



Once both the resource estimate has been updated and the slope design finalised, Bara Consultants will be in a position to finalise the reserve estimation and final pit designs, based on the recently generated operating cost assumptions.

Craton also commenced an IP programme over its mining and exploration licence. Typically, the Omitiomire type mineralisation occurs on the periphery of the dome structures. The only significant sulphides at Omitiomire are chalcocite with very minor chalcopyrite and bornite. Pyrite is essentially absent, therefore any IP anomaly should reflect copper mineralisation. Previous IP surveys were undertaken by Craton and good chargeability anomaly is present over the Omitiomire deposit, but other chargeability highs were not well followed-up previously. The IP programme commenced on Farm Omitiomire and will extend Westwards in the coming weeks.



Proposed IP Lines Plan – showing magnetic highs around the edge of the dome

Updated on latest metallurgical tests at Mintek

The metallurgical testwork programme that underpins the Bankable Feasibility Study has been concluded by Mintek. The work confirms that chloride leaching is a viable processing route at scale and the interim process design criteria supports the central case of the study. Metallurgical testing will continue to assess value enhancing ideas generated in conjunction with our consultants, Mintek and members of the Peer Review Group. This work will mainly focus on operating conditions that have an impact on increased recoveries or reduced inputs (especially sulphuric acid) and will not impact the design of the crushing, leaching and SX/EW itself, which has now been finalised. Test results were available sufficiently early and have been incorporated in the engineering and design process. The irrigation of the 1m sequential and 4m columns started in May last year, with the sulphide columns having been cured with salt and acid for 30 days and the oxide column with acid for 3 days.

Irrigation conditions were:

- Sulphide:
 - \circ **Condition 1 (Conservative):** The first condition was a conservative approach with irrigation at 10 L/h/m2 and 10 gpl acidity for the first 50 days (ILS Irrigation) and then



a second leaching cycle at 7 gpl (raffinate irrigation) with the same irrigation rate but using on-off irrigation. This was later reverted to 24h irrigation.

Condition 2 (Optimised Acid Consumption): The second condition was aimed at optimising the acid consumption and also test the higher recovery for low acid concentration in the leaching solution seen in the mini-columns. For sulphide ore an increased copper recovery was observed at lower acidities while the gangue acid consumption rate decreased significantly in the mini-columns. For this reason, a condition with a lower acid tenor and application rate was used: 7 L/h/m2 irrigation rate and 7 gpl acid for both cycles (ILS and raffinate). For the raffinate cycle also on-off irrigation was used initially, but reverted to 24h irrigation.

Each condition was tested on the same low grade (0.3%Cu), average grade (0.6%Cu), and high grade (0.9%Cu) composites as used in the mini-columns.

• **Oxide:** The mini-columns results indicated copper recovery to be acid concentration sensitive. For this reason, an irrigation rate of 10 L/h/m2 at 10 gpl acid was considered for both leaching cycle (ILS and RF). For RF cycle also on-off irrigation was used to optimise the acid consumption in this later stage.

The oxide column was stopped after 130 days with recovery approaching 90%. All except one sulphide column was stopped at 250 days, despite the fact that copper was still being recovered and the curves continued upwards.

The results of the columns indicate that the oxide material has the potential to recover more than 90% of total Cu and the sulphide columns have potential recovery of approximately 80% of total Cu, with smaller crush sizes generating also 90% recovery. The impact of the amount of acid used in Condition 1 vs Condition 2 is minimal – indicating that the acid consumption can be optimised further.

Future testwork at Mintek will be undertaken to optimise the crush size (within the parameters of the designed crushing circuit) and to confirm the irrigation parameters and heap height as suggested by recent modelling and internal discussions. The testwork for the BFS has shown crush size is critical in copper recovery in the lower sections of the heap (last 1-2 meters) and therefore optimising the crush size and the optimal heap heigh are relevant to value engineer the processing parameters.





One design change compared to the PEA based on the recent work was the reduction of the heap hight to three meters from four meters. That decision has a minimal impact on the capital expenditure of the project, as the land to the West and North-West to the pit is almost flat, with plenty of clay and aggregates available on the mining licence, allowing for a cost-effective construction of the heap leaching area.



Mining licence looking Northeast – future heap leach pad will be situated in the left of the picture

Update on Bankable Feasibility Study

The mining study by Bara Consulting is underway with initial pit and dump designs completed.

An initial schedule, based on the 2022 mineral resource estimate and new pit designs, indicates the potential for an 18-year mine life at production of 30,000 tonnes a year of cathode copper. This schedule will be refined once the new resource block model has been estimated in Q2, and pit optimisation and designs are complete.

Bara Consulting are also developing a bottom-up cost model for capital and operating cost estimation covering local labour costs, the mining fleet and all associated infrastructure. Waste dump designs and planning are also being undertaken in conjunction with the river diversion planning to optimise both the waste dumping areas and to reduce the earth movement for the river diversion.





Initial Pit Design with ramp in final years

As part of the BFS, a number of trade-off studies are being undertaken with inputs from CRU, Metc Engineering, Knight Piesold Consulting, Creo Engineering and MJO Metallurgical Consultants including:

- Leach pad design and operating philosophy: static leach pad design with over-stacking / retreat vs. dynamic on/off leach pad design with material removed after each leach cycle to ripios;
- <u>Sulphuric acid trade-off study</u>: combines a market study by CRU with a technical trade-off study comparing importation of sulphuric acid in Walvis Bay and trucking to site vs. importation of sulphur and production of sulphuric acid in an acid burning plant.

With regards to the engineering and procurement process, the process flowsheets have been developed by Metc Engineering, vendor and equipment lists have been developed and major equipment packages (datasheets and RFP) have been put out to the market for tenders. Based on met-testing results, interim Process Design Criteria and mass balances were issued, and modelling is on-going to finalise these workstreams.





Initial Process Flowsheet







Main BFS activities during the reporting period were:

- Finalization of the concept layout and site plan
- Started the final geotechnical investigation for all the site infrastructure;
- Finalised the acid market study and the acid trade-off study;
- Omico approved all major inputs into the heap-leach design trade-off study, simulation, with Metsim modelling in progress;
- Final analysis of completed met-testing programme;
- Optimisation tests agreed and Mintek started material preparation;
- Mine cost planning and scheduling on-going;
- Finalisation of the Process Flow Diagrams and preliminary Block Flow Diagrams;
- Completion of the preliminary design basis and mass / water balance;
- Omico signed off the Material Equipment List;
- Omico approved the vender / bidders list;
- Established the Procurement Operating Plan and agreed the procurement procedures;



- 3D drafting models for crushers, screening, agglomeration and EW;
- Development and review of the datasheets for most major capex items;
- Datasheets for minor equipment around 20% complete at the end of March;
- Preliminary design criteria for all electrical engineering and single line electrical layout drawings;
- Various key equipment was issued to market for costing (RFP), for instance crushers, vibrating equipment, feeders, agglomeration drum, the EW plant and the cathode stripping machine.

Completion of geochemical testwork

As part of the environmental permitting process, the Company collected 86 samples of waste from the 2023 RC drilling, and 10 marginal grade mineralised samples from core for a geochemical assessment programme to ensure the suitability of the waste for free dumping on surface. This assesses the material for Acid and Metalliferous Drainage (AMD) and Net Acid Producing Potential (NAPP) amongst other characteristics.

The programme was undertaken by ECC in Namibia, in conjunction with RGS Environmental Consultancy in Australia. The sample analysis was undertaken by Aquatico Scientific Laboratories in South Africa.



All except one of the waste samples contained less than 0.1% sulphur – therefore essentially barren of sulphur and with negligible capacity to generate acidity. Four of the mineralised samples have sulphur content of more than 0.1%S.

On the whole, the Net Acid Producing Potential (NAPP) – the balance between the capacity of a sample to generate acidity minus its capacity to neutralise acidity – is negative for all samples except one mineralised material sample.





Using a ratio of total sulphur and NAPP the samples are classified for the potential to form acid. The overwhelming majority of the samples tested have low sulphur content, excess Acid Neutralising Capacity (ANC) and are classified as NAF (Barren). Two of the mineralised material samples have elevated sulphur content and limited ANC, and as such are classified as Uncertain and one as Potentially Acid Forming (PAF).

Geochemical Classification	Fotal Sulfur ¹ (%)	NAPP (kg H₂SO₄/t)	ANC: MPA Ratio	Waste Rock (n = 86)	Mineralised Material (n = 10)
Non-Acid Forming (Barren) ²	≤ 0.1	-	-	85	6
Non-Acid Forming	> 0.1	< -5	-	1	1
Uncertain ³	> 0.1	> -5 and ≤ 5	≤ 2	0	2
Potentially Acid Forming (Low Capacity	> 0.1	> 5	< 2	0	1
Potentially Acid Forming	> 0.1	> 10	< 2	0	0

Geochemical Classification Criteria

Composites representing various rock-types of the waste and mineralised material were also taken for multi-element analysis. The results indicate that neither the waste nor mineralised material is significantly enriched with metals/metalloids compared to the median crustal abundance in unmineralised soils. Based on these results, it is expected that the risk of potential impact on the quality of surface and groundwater from initial contact with mine waste will be low.

Update on river diversion

The Black Nossob, and ephemeral river, flows through the site and proposed pit area. It is, therefore necessary to divert the flow of the river away from the pit area and waste dumps to the South.

Knight Piesold Consulting have successfully completed Phase 1 of the river diversion study with the initial numerical hydrological groundwater model now developed, hydrodynamic modelling of surface water has been undertaken and preferred routes for the river diversion selected.

Phase 2 has commenced with a geophysical survey of the current riverbed to investigate any subsurface flow, and the proposed routes of the river diversion. Shallow diamond drilling has commenced in the area of the intake and outlet of the proposed canal and along the proposed diversion routes. This drilling will be completed in Q2. Test pumping is being undertaken from existing and new



boreholes to verify the numerical hydrological groundwater model prior to finalising the diversion route and design. The Phase 2 hydrodynamic modelling will also be used for pit dewatering design.

Power and water supply updates

The received grid power supply proposal from the state utility, Nampower, was reviewed and followed up with successful meetings, enquiring on the security of future power supply and the possibility of upside in reducing the expected lead times for supplying grid power to the project. Appointment was further made to Creo Engineering, our Namibian engineering partner, to execute the bulk power supply studies for the BFS which have commenced and is on schedule. Creo Engineering have been working with Omico for the last two years, including on the preliminary power and water studies.

An extensive program was launched to onboard landowners for the completion of the water exploration study East of the mine site. The Namibia Agricultural Union has been approached to assist with public participation to ensure transparent and positive communication. Commercial terms have been drawn up and are being shared with interested parties, the first access agreements are signed. Geophysical surveys have commenced, and water exploration drilling is will be initiated soon.

Preliminary water supply routing and sizing has been completed by Creo Engineering, which will be followed by engineering and design required for the BFS as soon as production borehole locations have been finalized. Water exploration is in areas that are not interesting for mineral exploration and any abstraction will be done in a sustainable fashion. Water modelling has indicated that the mine will not have a material impact on the targeted aquifers even over a period of 15 years of minerals processing or more at mine site.



Craton exploration camp, with view towards mining area



Craton Foundation & Corporate Social Responsibility & External Affairs

As mentioned, two public participation sessions were held, attended by many neighbouring farmers. The farmers were forthright with their concerns, which will enable Omico to address these concerns going forward, ensuring a positive relationship with local communities. In addition, meetings were held with Summerdown community members. In general, the communities identified two main concerns:

- 1) lack of health support, this is due to Namibia being sparsely populated and the communities being far from major towns, and
- 2) security and poaching.

The Craton Foundation is in the process of engaging the Ministry of Health of Namibia, in an effort to have mobile clinics restarted, which were stopped during COVID and due to lack of funds. In addition, the Foundation will assess, in how to contribute to the security programs implemented by the farmers.

I look forward to updating you on our progress at the next Quarter and thank you for your interest.

Ingo Hofmaier, CEO, Omico Mining Corp.

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Trial pit with mineralised material clearly visible



About Omico

Omico is a joint venture between Greenstone Resources LP, a private equity fund specialising in the mining and metals sector and International Base Metals Limited, an Australian natural resources public company. The joint venture is managed by Greenstone Resources LP.

Omico through its Namibian subsidiary, Craton Mining and Exploration (Pty) Ltd, holds Mining Licence ML197 and Exclusive Prospecting Licence EPL8550, together a 30,000Ha licence area which makes up the Omitiomire Copper Project. The mining licence is valid until March 2036.

The Omitiomire Project has the potential to be a long life, low capital-intensive project, with an unconstrained CIM Measured and Indicated resource of 95.8 million tonnes at 0.59% Total Copper for 563,300t contained copper (0.25% Cu cut-off grade).

The development base case anticipates the production of 30,000 tonnes per annum of LME Grade A copper cathode for at least 15 years, targeting only open-pit mineralisation. The project capital expenditure is estimated to be circa. USD250 million, supporting a competitive capital intensity of <\$9,000/t.

The Company has recently completed a Technical Report using inputs from mainly Namibian-based mining and engineering consultants to de-risk the project. Using solvent-extraction and electrowinning (SX/EW) technology, combined with optimised hybrid solar PV and grid power, the project will produce copper cathode, a low emission and environmentally friendly copper product, not requiring any further smelting or tailings storage facilities.

The Omitiomire Copper Project area is located 120km East from Windhoek in central Namibia and is outside of any national parks, heritage-listed areas, groundwater-controlled area or Namibian areas of significance. The Environmental and Social Impact Assessment methodology applied to the permitting process follows Namibian law, international and national best practice and has been developed using International Finance Corporation (IFC) standards and models.

