geo40™

sustainable mineral recovery

CONFIDENTIAL TO GEO40 SHAREHOLDERS

QUARTERLY UPDATE TO SHAREHOLDERS

Calendar Q4 2023

The year 2023 was a challenging period for the Company, both in terms of raising essential development capital and in selling silica. However, this position changed during Q4 with both a conditional investment deal in place with London-based resources investor Vision Blue Resources and a rebound in silica sales on the back of the Company's sustained efforts. As we go to print, sales volumes have firmed considerably. The Company commissioned the build of two lithium-piloting assets during the period. The fabrication of both is now complete and the preliminary processing of initial samples of American lithium-bearing brines has commenced, in preparation for site deployment. An initial site deployment contract has been signed, with others currently under discussion as we prepare to widely showcase our direct lithium extraction (DLE) technology across North America through 2024.

While we felt that our efforts in securing silica sales were well directed through the 2023 year, we could not achieve sufficient sales volumes for much of the year to evidence this. However, this began to change late in the year as overall market confidence improved and we successfully penetrated new markets, as well as completing a low-carbon Environmental Product Declaration (EPD). Although there is much more to be done here, early indications in 2024 are encouraging.

2024 will be a key year in building the Company's brand in lithium. We plan to do this by operating at pilot scale on a wide range of lithium-bearing brines with counterparties across North America. Our work in scaling up our silica-recovery technology uniquely distinguishes us from most of our peers in lithium, which we believe will create a range of opportunities as we build visibility in North America.

OPERATING PERFORMANCE

During the quarter, operations were tailored to a fast-shifting, silica-sales book. Initially, the Northern and Ngawha Plants were kept idle whilst orders could be supplied from existing inventory, then the Northern Plant was restarted when new specialist products were required. As a result, production volume ramped up through the quarter, from no production in October (where orders were able to be fulfilled from inventory) through to over 100 tonnes of production in December. This represents a little under half the capacity of the Northern Plant, but progressively increasing customer demand through the quarter certainly signalled the potential need to return to full-production capacity in 2024.

The quarter was pivotal in the making of a customised low-pH (acidic) ion-exchanged product for an important existing USA-based customer. Making this product required the development of a small ion-exchange plant that was successfully commissioned during the quarter. It is proposed that this asset will be automated once customer demand grows and reaches stability. Importantly, early product volumes shipped fully met the customer's technical specifications, with the customer indicating increasing order volumes in 2024.

While making this new specialist product has been challenging, pricing is strong in relation to the additional production cost, signalling the potential to earn greater margins from customised products such as this. At present, this customer has already moved to taking over 100 tonnes per month of this product. We have a number of similar product innovations in the pipeline.

CONTINUING TO MAKE ADDED-VALUE SILICA PRODUCTS AND ADVANCING OUR DIRECT LITHIUM RECOVERY TECHNOLOGY

As noted earlier, innovative silica products are starting to play a larger role in the Company's sales book. We know that we can achieve superior pricing with such products and with our production capacity capped as a result of lower silica levels in the brine we receive from Contact Energy (as previously reported), this deliberate strategy will remain very important to us. Achieving technical acceptance from our USA-based customer for our low-pH ion-exchanged product was a significant win during the quarter.

The Company also achieved technical success in the utilisation of our geothermally derived silica in rubber applications, following sustained efforts during 2023 with key academics and an industry partner in Sri Lanka. Using silica in both natural and latex rubber improves tensile strength and can permit a reduction in the use of the compound carbon-black. We have developed our own intellectual property in this space and lodged a provisional patent during the quarter. We anticipate our first volume order in this new important sector in Q1 2024.

Geo40's New Zealand-based Lithium Pilot Plant continued testing overseas brines through the quarter. We processed our second Canadian brine successfully, making a small volume of battery-grade lithium carbonate. The team also constructed two key pieces of processing hardware that will be important in derisking the scale-up process. The first relates to how we capture lithium from a brine, with successful initial trials completed prior to Christmas. The second involves our solid-liquid separation approach and work here will extend into 2024.

The ultimate goal of our New Zealand lithium pilot work, our scale de-risking hardware and our offshore piloting programme is to complete our core lithium flow-sheet in Q2 2024, thereby permitting the design of a Lithium Demonstration Plant. As we work towards this goal, we are continuing to identify potentially unique intellectual property. As a result, we filed two new lithium patents during the quarter. Alongside this, we completed a high-level review of the intellectual property competitive landscape. Unlike silica, there is significant prior art and patent protection in the sector, meaning we must remain vigilant.

LOOKING FORWARD TO OPPORTUNITIES TO SITE-DEPLOY OUR LITHIUM TECHNOLOGY

While we had commenced procurement of long-lead-time items in the prior quarter, the Company formally contracted the build of our two North American piloting assets (a pre-treatment rig and a DLE rig) during the Q4 quarter. We engaged a Wyoming-based fabrication shop to build the pilot-scale pre-treatment rig, which is designed to deal with the organics in oilfield formation waters, before we undertake Direct Lithium Extraction (DLE). We also worked to close a contract with a California-based fabricator with whom we have worked for a decade, to build a pilot-scale DLE rig, which will essentially be an evolved replica of our New Zealand-based Lithium Pilot Plant. The rigs are mounted on large trailers to enhance mobility and efficient access to the various testing sites. We intend that they will be deployed on a range of sites across North America during the 2024 summer.

Through the Q4 quarter, we worked towards our first formal piloting agreement, which was signed in early 2024 with others still under discussion. We hope to work on a wide range of brines from Texas in the South, through the central western states, then to the oil-and-gas northern border states, before completing the programme in Canada. We have two key objectives here; to validate that our technology is applicable to the widest possible suite of brine types and to identify the best opportunity to scale up our technology to demonstration and ultimately commercial scale. Doing this work across North America will build our brand in DLE and help us identify the broadest possible range of opportunities.

Our next step beyond the piloting stage is to get a Demonstration Plant operating on a site in North America. We have carried out initial costing work on the build and operation of such an asset, this work heavily influencing discussions with Tembo Capital and Vision Blue. Through the quarter, we worked to align this work programme with our capital structure, in order to ensure that capital availability does not slow down potentially rapid deployment.

It will be important to have completed testwork on a sufficiently broad range of opportunities to be able to confidently choose the most appropriate site on which to proceed with the building of a Demonstration Plant, that will ultimately progress to the building of a Commercial Plant.

SALES AND MARKET DEVELOPMENT

Sales volumes achieved through the quarter varied significantly, from a low of c30 tonnes up to c140 tonnes per month, reflective of a very cautious silica market, where customers seemed motivated to order only their immediate needs and hold minimal inventory.

Given the very difficult sales environment, we evolved our marketing and sales resource base through the quarter. We reduced our New Zealand sales headcount whilst putting more focus on the recruitment of contracted sector-specific offshore sales personnel. We appointed a USA-based rubber-sector salesperson as the quarter drew to a close.

The quarter was notable for material progress with a new product we have been working on, to supply to an existing USA-based customer. The ion-exchanged product finds application in an automotive catalyst and it has taken us two years to penetrate this niche. This product was used in a plant trial by the customer and just prior to Christmas we were formally notified of technical acceptance. As we go to print, the order volume now exceeds 100 tonnes per month.

Development of products for dust control and soil stabilisation continued through the quarter. Field trials were completed both on site at Ohaaki, with a range of soil types, and in Hawkes Bay on New Zealand's east coast, where recovery work is ramping up following Cyclone Gabriel. This work is an extension of deep permeation grouting applications, for which we have a number of customers.

During the quarter, we also published our first Environmental Product Declaration (EPD) which captures the full-life-cycle carbon footprint of one of our principal silica products. We believe that this is already working to support uptake of our products in a range of markets.

While we struggled to sell silica for much of the period, as the quarter drew to a close we saw optimism return to the market. An existing admixture-industry customer ordered almost 150t of product, with 100t going into a geography that we regularly supply, and the balance going into the Middle East for the first time.

FINANCIAL, SECRETARIAL AND THE FUTURE

Building silica sales again

Investors will recall our challenges in building silica markets fast enough to keep up with our ability to produce silica products. While the quarter was very difficult with low market confidence, as it drew to a close we observed a significant positive shift. This has been evidenced by us currently not being able to keep up with the rate of increasing demand.

Moving into the field of lithium

We know that making our DLE technology visible in North America is key in creating compelling opportunity for the Company. We are on track to be in the field extracting lithium at pilot scale from Q2 2024, when improving weather conditions allow this field test-work to commence. The Company is now finalising the setting up of an American operating subsidiary as we contemplate field work commencing.

Capital and Equity Value Management and Governance

After investing in Geo40, Tembo Capital kindly introduced another London-based resources fund, Vision Blue Resources. We worked with Vision Blue through the quarter around a potential investment deal, with a particular focus on structuring a deal to both extend the Company's cash runway and to potentially facilitate the construction of a Lithium Demonstration Plant in North American from late 2024, following successful pilot testing.

Just before Christmas, we signed a conditional deal that will support this approach; US$5m of up-front, unencumbered new capital, with a follow-on US$3.5m option. The initial capital was designed to facilitate all core activity in silica and lithium, whilst also pushing out the Company's cash position from 12 months to at least 24 months. The option sits broadly alongside Tembo Capital's US$4m option so that, in aggregate, we forecast that, when exercised, we will have sufficient funding to build and operate a Lithium Demonstration Plant. The Vision Blue deal contained a general condition around completing due diligence, and shareholders will recall our confirmation in February 2024, that this condition had been satisfied and the deal had become unconditional.

Importantly, alongside investment capital that takes the Company forward, both Tembo and Vision Blue have signalled with their investments in Geo40, a strong desire to invest in the nascent lithium-brine sector in North America. Tembo has subsequently invested in a North American lithium-brine resource and both investors are working actively with the Company in identifying the highest value potential opportunities. We are thrilled to be collaborating in this manner with Tembo and Vision Blue.

Directors appointed earlier in 2023, Richard Crookes and Lisa Riley, have settled in now and are very actively supporting the Company's work on all fronts. This provides good board continuity in respect of long-serving Chair Bill Turner's signalled 2024 retirement, and we continue to map-out board skills and gaps ahead of further strategic appointments.

Adding Tembo and Vision Blue to our register materially changes our prospects, both in terms of the capital required to progress and also in terms of the potential opportunities we can create through effective collaboration. As we go into 2024, we expect to see our silica business achieve greater maturity as we, in parallel, work to emerge as one of a handful of very compelling technologies for sustainable lithium recovery in North America. 2024 promises to be an exciting year indeed, and I will keep you well-informed as we progress.

As always, I thank you sincerely for your support and belief in us.

Ngā mihi mahana.

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