



GREENTECH MINERALS LTD

ABN 85 115 050 452

PROSPECTUS

LEAD MANAGER: NOVUS CAPITAL LIMITED



Prospectus for the issue of 25,000,000 to 35,000,000 New Shares for subscription at \$0.20 cents each, to raise between \$5,000,000 (Minimum Subscription) and \$7,000,000 (Maximum Subscription). It is anticipated that the Offer will close on 12 December 2022 at 5pm (AEDT). The Directors reserve the right to close the Offer earlier or to extend this date without notice.

CORPORATE DIRECTORY

DIRECTORS

Dr Michael Etheridge (Non-Executive Chairman)
Mr Campbell Jones (Non-Executive Director)
Mr Hugh Dai (Executive Director)
Mr Stephen Ross (Non-Executive Director)
Mr Michael Ivkovic (Non-Executive Director)

COMPANY SECRETARY

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CHIEF EXECUTIVE OFFICER

Mr Peter Crooks

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Proposed ASX Code: GTM

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This is an important document and requires your immediate attention. It should be read in its entirety. Please consult your professional adviser(s) if you have any questions about this document. Investment in the New Shares offered pursuant to this Prospectus should be regarded as highly speculative in nature and investors should be aware that they may lose some or all of their investment. Refer to [Section 6](#) for a summary of the key risks associated with an investment in the New Shares.

IMPORTANT INFORMATION

Replacement Prospectus

This is a replacement prospectus dated 28 October 2022 (“Replacement Prospectus”) it replaces the original prospectus dated 12 October 2022 (“Original Prospectus”) in its entirety. A copy of this Replacement Prospectus has been lodged with the Australian Securities Investment Commission (ASIC). This Replacement Prospectus has been lodged to alleviate concerns raised by the ASIC regarding the forward-looking nature of certain statements in the Original Prospectus relating to production targets. As such investors should not rely on the Original Prospectus and the statements contained therein. Any statements that might be construed as production targets for the Company’s projects are formally retracted as the Company does not consider that it has reasonable grounds to disclose any production targets in the Company’s prospectus. Furthermore, any potential investor who has received a copy of the Company’s presentation on or about the date of the Original Prospectus is advised not to rely on any forward-looking statements made by the Company as these statements are also retracted.

This Prospectus is issued by Greentech Minerals Limited (ABN 85 115 050 452) (Greentech) or (The Company). This Prospectus is dated 12 October 2022 and was lodged with ASIC on that date. ASIC and the ASX and their respective officers take no responsibility for the contents of this Prospectus or the merits of the investment to which the Prospectus relates.

The expiry date of this Prospectus is 5.00pm AEDT on that date which is 13 months after the date this Prospectus was lodged with ASIC. No New Shares may be issued on the basis of this Prospectus after that expiry date.

An application will be made to the ASX within seven (7) days of the date of this Prospectus for Official Quotation of the Shares including the New Shares.

No person is authorised to give any information or to make any representation in connection with the Offer, other than as is contained in this Prospectus. Any information or representation not contained in this Prospectus should not be relied on as having been made or authorised by the Company or the Directors in connection with the Offer.

It is important that investors read this Prospectus in its entirety and seek professional advice where necessary.

Exposure Period

This Prospectus will be circulated during the Exposure Period. The purpose of the Exposure Period is to enable this Prospectus to be examined by market participants prior to the raising of funds. Potential investors should be aware that this examination may result in the identification of deficiencies in the Prospectus. In such circumstances, any Application that has been received may need to be dealt with in accordance with section 724 of the Corporations Act.

Applications under this Prospectus will not be processed by the Company until after the expiry of the Exposure Period. No preference will be conferred on persons who lodge Applications prior to the expiry of the Exposure Period.

Electronic Prospectus and Application Forms

This Prospectus will be made available in electronic form by being posted on the Company’s website at www.greentechminerals.com.au. Persons having received a copy of this Prospectus in its electronic form may obtain an additional paper copy of this Prospectus and the relevant Application Form (free of charge) from the Company’s registered office during the Offer Period by contacting the Company. Contact details for the Company and details of the Company’s registered office are

detailed in the Corporate Directory. The Offer constituted by this Prospectus in electronic form is only available to persons receiving an electronic version of this Prospectus and relevant Application Form within Australia.

Applications will only be accepted by applying online at www.greentechminerals.com.au or on the relevant Application Form attached to, or accompanying, this Prospectus or in its paper copy form as downloaded in its entirety from www.greentechminerals.com.au. The Corporations Act prohibits any person from passing on to another person the Application Form unless it is accompanied by or attached to a complete and unaltered copy of this Prospectus.

Prospective investors wishing to subscribe for New Shares under the Offer should complete the Application Form. If you do not provide the information required on the Application Form, the Company may not be able to accept or process your Application.

Website

No document or information included on the Company's website is incorporated by reference into this Prospectus.

Foreign Investors

No action has been taken to register or qualify the New Shares the subject of this Prospectus, or the Offer, or otherwise to permit the public offering of the New Shares, in any jurisdiction outside Australia. The distribution of this Prospectus in jurisdictions outside of Australia may be restricted by law and persons who come into possession of this Prospectus outside of Australia should seek advice on and observe any such restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws. This Prospectus does not constitute an offer of New Shares in any jurisdiction where, or to any person to whom, it would be unlawful to issue this Prospectus.

Speculative Investment

The New Shares offered pursuant to this Prospectus should be considered highly speculative. There is no guarantee that the New Shares offered pursuant to this Prospectus will make a return on the capital invested, that dividends will be paid on the New Shares or that there will be an increase in the value of the shares in the future.

Prospective investors should carefully consider whether the New Shares offered pursuant to this Prospectus are an appropriate investment for them in light of their personal circumstances, including their financial and taxation position. Refer to [Section 6](#) for details relating to the key risks applicable to an investment in the New Shares. Some of the key risks include:

- the inability of the Company to obtain permits for or the loss of the Significant Tenement;
- termination of a Material Contract;
- changes in Australian and foreign government regulation and policies in the mining or technology sectors; and
- key person risk including Mike Etheridge, Peter Crooks or Campbell Jones.

Using this Prospectus

Persons wishing to subscribe for New Shares offered by this Prospectus should read this Prospectus in its entirety in order to make an informed assessment of the assets and liabilities, financial position and performance, potential profits and losses, and prospects of the Company and the rights and liabilities attaching to the New Shares offered pursuant to this Prospectus. If persons considering subscribing for New Shares have any questions, they should consult their stockbroker, solicitor, accountant or other professional adviser for advice.

Privacy Statement

To apply for New Shares, you will be required to provide certain personal information to the Company and the Share Registry. The Company and the Share Registry will collect, hold and use your personal information in order to assess your Application, service your needs as an investor, provide facilities and services that you request and carry out appropriate administration. The Corporations Act and taxation law requires some of this personal information to be collected. If you do not provide the information requested, your Application may not be able to be processed efficiently, or at all.

By submitting an Application Form, each Applicant agrees that the Company may use the information provided by that Applicant on the Application Form for the purposes detailed in this Privacy Statement and may disclose it for those purposes to the Share Registry, the Company's proposed Related Bodies Corporate, agents, contractors and third-party referral agents, including mailing houses and professional advisers, and to ASX and other regulatory authorities.

If an Applicant becomes a Shareholder, the Corporations Act requires the Company to include information about the Shareholder (including name, address and details of the New Shares held) in its public register. The information contained in the Company's public register must remain there even if that person ceases to be a Shareholder. Information contained in the Company's register is also used to facilitate distribution payments and corporate communications (including the Company's financial results, annual reports and other information that the Company may wish to communicate to its Shareholders) and compliance by the Company with its legal and regulatory requirements.

Forward-Looking Statements

This Prospectus contains forward-looking statements which are identified by words such as "believes", "estimates", "expects", "targets", "intends", "may", "will", "would", "could", or "should" and other similar words that involve risks and uncertainties.

Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, the Directors and management of the Company. Key risk factors associated with an investment in the Company are detailed in [Section 6](#). These and other factors could cause actual results to differ materially from those expressed in any forward-looking statements.

The Company has no intention to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this Prospectus, except where required by law. The Company cannot and does not give assurances that the results, performance or achievements expressed or implied in the forward-looking statements contained in this Prospectus will actually occur and investors are cautioned not to place undue reliance on these forward-looking statements. No person named in this Prospectus, nor any other person, guarantees the performance of the Company or the return of capital or the payment of a return on the New Shares.

Photographs and Diagrams

Photographs used in this Prospectus which do not have descriptions are for illustration only and should not be interpreted to mean that any person shown endorses this Prospectus or its contents or that the assets shown in them are owned by the Company. Diagrams used in this Prospectus are illustrative only and may not be drawn to scale. Unless otherwise stated, all data contained in charts, graphs and tables is based on information available at the date of this Prospectus.

Currency

All financial amounts contained in this Prospectus are expressed as Australian currency unless otherwise stated. All references to "\$", "A\$" or "AUD" are references to Australian dollars.

Time

All references to time in this Prospectus are references to AEST or AEDT as applicable, being the time in Sydney, New South Wales, unless otherwise stated.

Glossary

Defined terms and abbreviations used in this Prospectus are detailed in the Glossary in [Section 14](#).

LETTER FROM THE CHAIRMAN

Dear Investor,

On behalf of the Directors of Greentech Minerals Limited (Greentech) or (The Company), it gives me great pleasure to invite you to become a shareholder of the Company.

Greentech offers investors exposure to the rapidly growing market for high-purity quartz (HPQ). HPQ is a vital ingredient in the solar panel, semiconductor, and other high tech industry sectors, in which the highest purities are critical. Greentech has identified quartz vein deposits on its tenements near Mount Isa in northwest Queensland, and work done to date by the Company and potential offtake partners has been very encouraging.

Greentech has already undertaken considerable exploration including bulk sampling, trial mining and assaying. A JORC-compliant Resource has been estimated by an external consultant, and the Company has been granted a Mining Lease that enables us to commence production. This previous work, detailed elsewhere in the Prospectus, has given the Company confidence that it can mine, process and deliver a HPQ feedstock product that will be attractive to customers in this highly specialised business.

The challenge with developing a new HPQ feedstock mining and production project is that there is a wide range of products and prices based on the overall silica purity and the amounts of specific impurity elements, both for the run-of-mine quartz and after various stages of processing and beneficiation. Accordingly, the funds raised under this offer will be largely directed to completing a feasibility study for the commencement of mining, production, preliminary processing, clearly identifying our market niche and negotiating offtake contracts with HPQ processing firms. To this end we have contracted a series of bench-scale sorting, processing and beneficiation trials by two leading international HPQ specialist firms to optimise product quality and price for the Company's quartz. Results from these trials should be available to the Company before the end of 2022.

Following completion of some minor preliminary planning the Company aspires to move to production as soon as possible. The Company has secured a preliminary offtake agreement to supply a minimum of 5000 tonnes of HPQ feedstock per annum to Jiangsu Yangshan Silicon Materials Technology Co Ltd in China. Finalising product specification and pricing for that offtake will be a priority.

The Company has a longer-term ambition to build a full beneficiation and refinement plant in northern Queensland and thereby to participate in the highest value parts of the HPQ market. Utilizing the funds raised pursuant to this Prospectus we will commence preliminary planning for such a venture.

Greentech holds 650km² of contiguous exploration ground near Mount Isa with numerous quartz veins identified throughout. The Company's tenement package is also prospective for copper, cobalt, gold, vanadium and phosphate. The Company intends to advance exploration for these commodities, as well to expand the HPQ resource inventory.

An independent report on the global HPQ market predicts demand for refined HPQ products to increase by over 50% in volume and by 90% in value during this decade, against the backdrop of an increasing number of government initiatives to promote green energy and tackle climate change. The report predicts that the main growth will be in the solar photovoltaic cell market.

This Prospectus is seeking to raise \$5,000,000 via the issue of New Shares at an issue price of \$0.20 per share, with the provision to raise an additional \$2,000,000 by issuing an additional 10,000,000 New Shares of \$0.20 each. The purpose of the Offer is to provide funds to implement the Company's business strategies that are outlined in more detail elsewhere in this Prospectus.

The Board and executives have significant expertise and experience in mineral exploration, project development and mining, with specific expertise in industrial minerals and the HPQ business, as well as in corporate governance and financing. This team aims to ensure that funds raised through the Offer will be utilised in a cost-effective manner to advance the Company's business ambitions in this exciting sector.

This Prospectus is issued for the purpose of supporting an application to list the Company on the ASX. The Prospectus contains detailed information about the Company, its business, and the Offer, as well as the risks of investing in the Company. The Shares offered by this Prospectus should be considered highly speculative.

I look forward to you joining us as a shareholder and sharing in what we believe are exciting times ahead for the Company. Before you make your investment decision, I urge you to read this Prospectus in its entirety and seek professional advice if required.

Yours sincerely




Dr Michael Etheridge
Chairman

TIMETABLE

Lodgement of Original Prospectus with ASIC	12 October 2022
Lodgement of Replacement Prospectus with ASIC	28 October 2022
Opening Date of the Offer	31 October 2022
Closing Date of the Offer	12 December 2022
Issue of New Shares under the Offer	13 December 2022
Dispatch of holding statements	14 December 2022
Expected date for quotation of the New Shares on the ASX	20 December 2022

The above dates are indicative only and may change without notice. The Company reserves the right to amend the timetable at any time. In particular, the Company reserves the right to vary the Closing Date without prior notice, which may have a consequential effect on the other dates. Applicants are encouraged to lodge their Application Forms as soon as possible if they wish to invest in the Company.

1. INVESTMENT OVERVIEW

Question	Summary	More Information
<p>Who is issuing this Prospectus?</p>	<p>Greentech Minerals Limited (ABN 85 115 050 452) (formerly Yilgarn Infrastructure Limited) is an unlisted public company.</p> <p>Greentech was incorporated in New South Wales, Australia on 30 June 2005 to facilitate the development of the Port and Rail Project in Western Australia's Mid -West region on an open access, multi-user basis. However, that business opportunity did not eventuate.</p> <p>In 2015 the Company took the opportunity to acquire 100% of an exploration area near Mount Isa in western Queensland. The Tenements were considered to be highly prospective for high purity quartz feedstock and to also have potential for other commodities.</p>	<p>Section 2</p>
<p>What industry does Greentech operate in?</p>	<p>Background to the HPQ Industry</p> <p>The Company is in the business of development, mining, physical processing and marketing of high purity quartz (SiO₂) feedstock (HPQF) from its deposits near Mount Isa, northwest Queensland. HPQF is typically greater than 99.9% SiO₂ and is purchased by specialist refiners to create a range of high purity quartz (HPQ) products with purities of greater than 99.99% and as high as 99.999%. Refined HPQ is a scarce, high-tech material critical in the manufacture of solar photovoltaic cells, microchips and specialist glass products used in the solar, semiconductor and fibre optic industries.</p> <p>The HPQ market is heavily concentrated, with around 70% of the world's HPQ feedstock sourced by two companies (Sibelco and QuartzCo) from a single deposit in the USA and refined into a range of high-purity products by those companies. China is the next largest producer of refined HPQ products. It is mainly a purifier of HPQ as it has limited deposits of HPQF, and it sources feedstock mainly from small producers throughout China and South Asia. Other smaller producers of refined HPQ and end-user products are in Russia, Canada and Europe. The Company is not aware of any current HPQ production in Australia.</p>  <p>The above pictures are illustrative only and do not represent assets of the Company.</p> <p>A recent analysis of the refined HPQ market (Exawatt and ANZAPLAN, 2021) forecasts 55% growth in volume and 90% growth in value out to 2030 in a supply-constrained market, with most of the growth in the solar market.</p>	<p>Section 5</p>
	<p>The Company plans to be an alternative supplier of HPQF into a growing and increasingly supply-constrained export market (Exawatt and ANZAPLAN, 2021), mainly in Asia, with a longer-term ambition to enter the downstream refined HPQ market via its own purification plant in Australia.</p>	

Question	Summary	More Information
<p>What are Greentech 's opportunities and business strategy?</p>	<p>The Opportunities</p> <p>The Company will pursue three main opportunities during the two years following IPO.</p> <p>The Company has undertaken over the past 7 years much of the work that is required to underpin formal targets and forecasts and plans to complete that work during the first 6 to 12 months after IPO. The relevant past work and the information from it includes, <i>inter alia</i>, the following:</p> <ul style="list-style-type: none"> • Greentech was granted ML100124 in August 2019; award of an ML in Queensland requires a basic mine plan and environmental assessment report to have been completed, as well as landholder and native title agreements; the ML permits the Company to mine up to 20,000 tonnes per annum ('tpa'); • a Measured and Indicated Resource estimated by an independent expert sufficient to underpin between 5 and 10 years' production; • two trial mining campaigns that provided information on mining methods and costs; both campaigns were contracted to a local Mount Isa based firm that is likely to be the preferred mining, crushing and screening partner for future full-scale mining; and • bulk parcels of run-of-mine HPQF has been delivered to potential offtake partners in China, leading to successful upgrading to HPQ of crucible grade and an offtake agreement for a minimum of 5,000 tpa. <p>The only things that remain to be done to achieve a formal production target are practical planning and costings of contract mining, contract processing and transport to port, and some limited site preparation. The 6 to 12 months prior to commencement of production is to complete these aspects, negotiate some minor variations to the offtake agreement, and engage an independent expert to provide review and sign-off of on these plans.</p>	<p>Section 3, Section 4 and Section 5</p>

Question	Summary	More Information
	<p>1. Development, Mining and Front-end Processing of HPQ Feedstock</p> <p>Greentech has already defined a Measured and Indicated Resource totalling over 200,000 tonnes of HPQF within its granted Mining Lease and elsewhere within EPM25894 at a grade of 99.96% SiO₂ (Biggs, 2022)</p> <p>Subject to raising the funds pursuant to this Prospectus the Company will implement the following plan:</p> <ul style="list-style-type: none"> • Resource expansion and Resource to Reserve conversion to underpin mine planning sufficient for 5 years production. This will include submitting applications for at least two additional Mining Leases as soon as practicable after listing. • Completion of bench-scale processing and beneficiation trials by a leading international HPQ specialist to optimise product quality and revenue opportunity for the Company's quartz. • Following completion of further technical and financial studies, the Company plans to mine quartz which will then be transported to a contract crushing, screening and washing facility on the outskirts of Mount Isa, with the option of adding a sorting plant, to produce HPQ feedstock suitable for sale to HPQ processors in China or elsewhere. The studies are expected to be completed between 6 and 12 months after IPO. Test work is currently being undertaken at a European facility to assess the capability of a range of the latest sorting technologies to upgrade our product at modest cost prior to sale. • Complete a mining, development and processing plan and once completed to move to production as sale of HPQF as soon as possible. • Develop a marketing strategy, engage with potential offtake partners and complete offtake contracts. <p>2. Plans for purification plant</p> <p>The underlying high grade of the Company's HPQF deposits puts it in a position to participate in the refinement and beneficiation segment of the market, and to capitalise on the looming shortage of refined HPQ products on the world market.</p> <p>Following listing the Company intends to initiate a feasibility study into the possibility of building its own state-of-the-art purification and beneficiation plant in the Mount Isa region, and thereby to take advantage the higher margins available for higher grade HPQ products.</p>	<p>Section 4</p>

Question	Summary	More Information
	<p>3. Exploration for other minerals in its tenement package</p> <p>The Company controls a total of 650km² over four contiguous exploration licenses near Mount Isa. Quartz veins have been identified across much of this area and they represent targets for additional exploration and assessment as HPQ feedstock. The Company's consultants have estimated an HPQF exploration target of between a further 160,000 and 540,000 tonnes (Biggs, 2022; IGR, 2022) in a selection of the larger additional veins and we will advance exploration of these veins to grow the Company's Resource and Reserve base during the next two years.</p> <p>The area also has prior exploration data which suggests prospectivity for other minerals such as copper, vanadium and phosphate. Recent drilling reported by two of our near neighbours (Chalkos Minerals, 2022; Cooper Mining, 2022) have provided increased confidence in the potential for iron-oxide copper gold (IOCG) mineralisation within Greentech's EPM's. The Company will devote limited funds to further assess this potential.</p>	<p>Section 4</p>
	<p>Business Model</p> <p>The Mining Operation</p> <p>Once successful feasibility studies are completed, it is expected that the mining operation is expected to be a simple, small-scale operation, mostly limited to less than 10m below the surrounding land surface and will have a low environmental impact. Greentech currently plans to use a selective mining technique with mobile equipment provided under contract by a local firm. For the first two years mining will start within ML 100124, which is already permitted for up to 20,000 tpa. The Company plans to apply for additional Mining Leases soon after listing.</p> <p>Greentech has had detailed assays of samples from 11 of its quartz veins undertaken by a leading Australian assay laboratory. It also shipped bulk samples to a Chinese HPQ processing and marketing firm (Jiangsu Yangshan Silicon Materials Technology Co Ltd – JYSMT) in 2015 and 2016 for trial beneficiation and appraisal.</p> <p>The Australian assay results averaged 99.96% SiO₂ whilst trial processing and beneficiation indicated good potential for upgrading the Company's quartz to a refined HPQ product. In fact, the Chinese laboratory indicated that a specification of as much as 99.997% with less than 30 parts per million (ppm) aluminium might be attainable.</p> <p>At present the Company cannot provide firm prices that it will receive for its product(s). The Company's preliminary estimate, based largely on anecdotal information from a range of sources, is that the Run-of-Mine (ROM) product will, with limited processing, return between US\$500 and US\$700 per tonne. However, Greentech plans to use low-cost crushing, sorting and washing to improve the purity of its product and its attractiveness to potential process offtake partners. There is a market for such a product that attracts US\$1,000 to US\$1,200 per tonne in parts of the market (Exawatt and ANZAPLAN, 2021).</p>	<p>Section 3 and Section 4</p>

Question	Summary	More Information
	<p>The Refined HPQ Market and Processing Options</p> <p>The suitability and value of quartz ore for different end uses is based on the total impurity content and on the amount of specific deleterious elements. There is no central market for pricing and selling HPQ. Rather, producers operate under individual offtake agreements with either HPQ processing / beneficiation companies or manufacturers of specific end products. As far as the Company is aware, there are no HPQ purification plants in Australia.</p> <p>The processing of suitable quartz ore is a multistage process, commencing with crushing, water and acid washing and a range of sorting technologies (e.g., magnetic and optical separation) on the washed and dried product. Further beneficiation requires high temperature treatment and a more expensive and sophisticated plant.</p> <p>Based on that work, and its results, which is expected to be available soon after listing, the Company will be able to undertake a cost - benefit analysis of the range of processing treatments that it undertakes prior to offtake.</p> <p>At this stage the Company is exploring two options:</p> <ul style="list-style-type: none"> • Direct sale of ROM product with limited crushing, screening and washing offtake parties in Asia, and/or; • To undertake further washing, sorting and other physical processing in a small plant that the Company builds at or near its mine. The aim would be to raise the SiO₂ content to or close to 99.99%, which should enable the Company to negotiate a significantly higher price for its product. 	<p>Section 5</p>
	<p>The HPQ Market and Opportunities for Greentech</p> <p>A recently released report (Exawatt and ANZAPLAN, 2021) on the global HPQ market has the following headline conclusions.</p> <p><i>“High-purity quartz (HPQ) has a pivotal role as a critical raw material in sectors such as semiconductor and solar photovoltaic (PV) manufacturing. The current and expected growth in these sectors, vital for ongoing progress in renewable energy and other decarbonization-related industries and high-technology sectors, will significantly increase the demand in HPQ by 55% in volume and 90% in revenue until 2030.”</i></p> <ul style="list-style-type: none"> • The solar photovoltaic (PV) sector and semiconductor market are the key driver of growth • HPQ demand for PV applications will double in volume and almost triple in revenue by 2030 • Industry is poised to intensify the requirement to increase production capacity and develop new HPQ sources <p>Greentech is well-placed to deliver its product into this growing market and to take advantage of the attractive price increases.</p>	<p>Section 5</p>

Question	Summary	More Information
<p>What are the significant dependencies to the Greentech Business Model?</p>	<p>The Company's business is dependent on the continued growth in demand and price of the HPQ market in international markets.</p> <p>Significant dependencies</p> <p>These include:</p> <ul style="list-style-type: none"> (i) Global demand for HPQ to remain strong with the Company able to realise an economic price for its product; (ii) Availability of exploration contractors, mining contractors and associated mining equipment to fulfil the Company's objectives; (iii) The ability to generate strong cash flow and sustainable market share to support design and build small HPQ on site processing plant; and (iv) Complete a feasibility and secure government approval and financial support to potentially build a HPQ purification plant with annual production capability of 20,000tpa. 	<p>Section 5, Section 6</p>
<p>What are the key risks?</p>	<p>Exploration and operating</p> <p>The exploration permits and mining licenses comprising the Tenements are at various stages of exploration, and potential investors should understand that mineral exploration and development are high-risk undertakings.</p> <p>There can be no assurance that future exploration of these licenses, or any other mineral licenses that may be acquired in the future, will result in the discovery of an economic resource. Even if an apparently viable resource is identified, there is no guarantee that it can be economically exploited.</p> <p>Additional Requirements for Capital</p> <p>The Company's capital requirements depend on numerous factors. The Company may require further financing in addition to amounts raised under the Offer. Any additional equity financing will dilute shareholdings, and debt financing, if available, may involve restrictions on financing and operating activities. If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations and scale back its exploration programs and mine development as the case may be. There is, however, no guarantee that the Company will be able to secure any additional funding or be able to secure funding on terms favourable to the Company or at all.</p> <p>Tenure and Approvals</p> <p>The success of the Company will depend upon the Company being able to maintain title to the Tenements and obtaining all required approvals for the contemplated activities, including obtaining the approval to build a processing plant. In the event that exploration programs and plant construction is not permitted or proves to be unsuccessful this could lead to a diminution in the value of the Tenements, a reduction in the cash reserves of the Company and possible relinquishment of one or more of the Tenements.</p> <p>Other risks</p> <p>The above list is not exhaustive, please see Section 6 of this Prospectus for a detailed list of risks applicable to the Company.</p>	<p>Section 6</p>

Question	Summary	More Information
<p>What are the key strengths and competitive advantages of Greentech?</p>	<p>(1) The Company has defined sufficient resources of HPQ feedstock of potentially marketable grade to explore sales and marketing of this HPQ feedstock.</p> <p>(2) Based on assays and processing trials undertaken, the Directors consider that the Company's HPQ feedstock is of sufficient purity to be attractive to potential HPQ processing offtake partners.</p> <p>(3) An experienced management team across corporate development, industrial minerals, including silica operations, mining and technical operations in Australia.</p>	<p>Section 3, Section 4 and Section 5</p>
<p>What is the financial position of Greentech?</p>	<p>The Company has raised working and development capital over the past 5 years from existing Shareholders of approximately \$6.45 million. The funds have been used to explore for and define a resource and to obtain a Mining License to enable commencement of mining and production. Further funds were used to trial mine and test the Company's HPQ feedstock in China, and for a Chinese processing facility to produce HPQ saleable end product.</p> <p>As part of this process the Company was able to acquire the full feasibility studies and technology know-how for a potential HPQ purification plant. Further funds were also used for mining and shipping costs of the bulk samples sent to China as well as general working capital.</p> <p>The full financial position of the Company can be found in Section 9 of this Prospectus and the Independent Limited Assurance Report in Section 10.</p>	<p>Section 9</p>
<p>Who are the Directors of Greentech?</p>	<ul style="list-style-type: none"> • Dr Michael Etheridge (Chairman and Non-Executive Director) • Mr. Michael Ivkovic (Non-Executive Director) • Mr. Hugh Dai (Executive Director) • Mr. Stephen Ross (Non-Executive Director) • Mr. Campbell Jones (Non-Executive Director) 	<p>Section 7</p>
<p>What material contracts has the Company entered into?</p>	<p>There are many contacts including:</p> <ul style="list-style-type: none"> • Service Agreements with Non-Executive Directors, Mike Etheridge, Michael Ivkovic, Stephen Ross and Campbell Jones. • Employment Agreement with Chief Executive Officer, Peter Crooks. • Loan Agreement with Hugh Dai. • Employment Agreement with Executive Director, Hugh Dai. • Integrated Corporate Solution Agreement. • Prandium Capital Pty Ltd Agreement. • Deed Regarding the Grant of Mining Lease 100124. • Compensation Agreement "May Downs" with James and Marjorie Lord. 	<p>Section 11</p>

Question	Summary	More Information																																																																						
	<ul style="list-style-type: none"> • Offtake Agreement with Jiangsu Yangshan Silicon Material Technology Co Ltd. • Farm in Agreement with Multi Mines Pty Ltd; • Share Sale Agreement between the Vendors and the Company in respect to the sale of Millungera Energy Minerals Pty Ltd to the Company • Lead Manager Agreement between the Lead Manager and the Company <p>The terms of these Agreements are summarised in Section 11.</p>																																																																							
<p>How will the proceeds of the Offer be used?</p>	<p>The Company intends to use the funds raised from the offer as follows (based on both Minimum and Maximum Subscriptions):</p> <table border="1" data-bbox="432 730 1337 1357"> <thead> <tr> <th></th> <th colspan="2">Min: \$5m Raise</th> <th colspan="2">Max: \$7m Raise</th> </tr> <tr> <th>Activity</th> <th>Total AUD</th> <th>%</th> <th>Total AUD</th> <th>%</th> </tr> </thead> <tbody> <tr> <td>Exploration</td> <td>\$600,000</td> <td>12.00</td> <td>\$1,100,000</td> <td>15.71</td> </tr> <tr> <td>Feasibility Study</td> <td>\$560,000</td> <td>11.20</td> <td>\$640,000</td> <td>9.14</td> </tr> <tr> <td>Mine Development</td> <td>\$600,000</td> <td>12.00</td> <td>\$700,000</td> <td>10.00</td> </tr> <tr> <td>Mine & Process OPEX</td> <td>\$550,000</td> <td>11.00</td> <td>\$900,000</td> <td>12.86</td> </tr> <tr> <td>FS Beneficiation Plant</td> <td>-</td> <td>0.00</td> <td>\$600,000</td> <td>8.57</td> </tr> <tr> <td>Tenement Payment (MEM)</td> <td>\$350,000</td> <td>7.00</td> <td>\$350,000</td> <td>5.00</td> </tr> <tr> <td>Sales & Marketing</td> <td>\$120,000</td> <td>2.40</td> <td>\$180,000</td> <td>2.57</td> </tr> <tr> <td>Loan Repayment (yr2)</td> <td>\$240,000</td> <td>4.80</td> <td>\$240,000</td> <td>3.43</td> </tr> <tr> <td>Corporate Costs</td> <td>\$780,000</td> <td>15.60</td> <td>\$780,000</td> <td>11.14</td> </tr> <tr> <td>IPO Offer Costs</td> <td>\$680,000</td> <td>13.60</td> <td>\$810,000</td> <td>11.57</td> </tr> <tr> <td>Working Capital</td> <td>\$520,000</td> <td>10.40</td> <td>\$700,000</td> <td>10.00</td> </tr> <tr> <td>TOTAL</td> <td>\$5,000,000</td> <td>100.00</td> <td>\$7,000,000</td> <td>100.00</td> </tr> </tbody> </table>		Min: \$5m Raise		Max: \$7m Raise		Activity	Total AUD	%	Total AUD	%	Exploration	\$600,000	12.00	\$1,100,000	15.71	Feasibility Study	\$560,000	11.20	\$640,000	9.14	Mine Development	\$600,000	12.00	\$700,000	10.00	Mine & Process OPEX	\$550,000	11.00	\$900,000	12.86	FS Beneficiation Plant	-	0.00	\$600,000	8.57	Tenement Payment (MEM)	\$350,000	7.00	\$350,000	5.00	Sales & Marketing	\$120,000	2.40	\$180,000	2.57	Loan Repayment (yr2)	\$240,000	4.80	\$240,000	3.43	Corporate Costs	\$780,000	15.60	\$780,000	11.14	IPO Offer Costs	\$680,000	13.60	\$810,000	11.57	Working Capital	\$520,000	10.40	\$700,000	10.00	TOTAL	\$5,000,000	100.00	\$7,000,000	100.00	
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<p>Will the Company pay dividends?</p>	<p>The Company anticipates that significant expenditure will be incurred in the evaluation and development of the Company's Projects. These activities are expected to dominate at least the first two-year period following the date of this Prospectus. Accordingly, the Company does not expect to declare any dividends during that period. Any future determination as to the payment of dividends by the Company will be at the discretion of the Directors and will depend on the availability of distributable earnings and operating results and the financial condition of the Company, future capital requirements and general business and other factors considered relevant by the Directors. No assurance in relation to the payment of dividends or franking credits attaching to dividends can be given by the Company.</p>	<p>Section 2</p>																																																																						

Question	Summary	More Information
Where will the Shares be quoted?	It is proposed to list the Shares including the New Shares on the Australian Securities Exchange (ASX) and the Offer under this Prospectus is conditional upon the ASX granting conditional approval for the Company to be listed on ASX. The Company will have the ASX code: GTM.	Section 2
How can I obtain further advice?	By speaking to your accountant, stockbroker or other licensed professional advisor.	Section 2
What is the Offer?	The Offer is an offer of a minimum of 25,000,000 Shares at an issue price of \$0.20 per Share to raise up to \$5,000,000 (before costs) (Minimum Subscription) with a maximum offer of up to 35,000,000 Shares at an issue price of \$0.20 per Share to raise up to \$7,000,000 before costs (Maximum Subscription).	Section 2
What are the purposes of the Offer?	The purposes of the Offer is to facilitate an application by the Company for admission to the Official List and, to position the Company to seek to achieve the objectives stated and pursue its business strategy outlined in Section 1 of this Prospectus.	Section 2
Is the Offer underwritten?	No, the Offer is not underwritten.	Section 2
Who is the Lead Manager to the Offer?	Novus Capital Limited AFSL 238168	Section 2
Who is eligible to participate in the Offer?	This Prospectus does not, and is not intended to, constitute an offer in any place or jurisdiction, or to any person to whom, it would not be lawful to make such an offer or to issue this Prospectus. The distribution of this Prospectus in jurisdictions outside Australia may be restricted by law and persons who come into possession of this Prospectus should seek advice on and observe any of these restrictions. Any failure to comply with such restrictions may constitute a violation of applicable securities laws.	
How do I apply for Shares under the Offer?	Applications for New Shares under the Offer must be made by completing the Application Form attached to this Prospectus in accordance with the instructions set out in the Application Form or by going to the Company's www.greentechminerals.com.au web site and applying and paying on line after reading this Prospectus.	Section 2 , Section 15
What is the allocation policy?	The Company retains an absolute discretion to allocate New Shares under the Offer. There is no assurance that any applicant will be allocated any New Shares, or the number of New Shares for which it has applied	Section 2

Question	Summary	More Information
What will the Company's capital structure look like on completion of the Offer?	The Company's capital structure on a post-Offer basis is set out in Section 2 of this Prospectus.	Section 2
What are the terms of the Shares offered under the Offer?	A summary of the material rights and liabilities attaching to the Shares including New Shares offered under the Offers are set out in Section 2.	Section 2
Will any Shares be subject to escrow?	<p>None of the New Shares issued under the Offer will be subject to escrow.</p> <p>However, subject to the Company complying with Chapters 1 and 2 of the ASX Listing Rules and completing the Offer, certain securities on issue may be classified by ASX as restricted securities and will be required to be held in escrow as determined by the ASX Listing Rules from the date of Official Quotation.</p> <p>During the period in which restricted Shares are prohibited from being transferred, trading in Shares may be less liquid, which may impact on the ability of a Shareholder to dispose of their Shares in a timely manner.</p> <p>The Company will announce to ASX full details (quantity and duration) of the Securities required to be held in escrow prior to the Shares commencing trading on ASX.</p> <p>The Company confirms its 'free float' (the percentage of the Shares that are not restricted and are held by shareholders who are not related parties (or their associates) of the Company) at the time of admission to the Official List of ASX will be not less than 20% in compliance with ASX Listing Rule 1.1 Condition 7.</p> <p>In addition to any mandatory escrow imposed by ASX, a quantum of shareholders with more than 150,000 shares have agreed to escrow up to 80% of their shares for 4 to 6 months after listing. Full details of this are disclosed in clause 2.4.2.</p>	Section 2
Will the Shares be quoted on ASX?	Application for quotation of all Shares to be issued under the Offer will be made to ASX no later than 7 days after the date of this Prospectus.	Section 2
What are the key dates of the Offer?	The key dates of the Offer are set out in the indicative timetable on page viii of this Prospectus.	Page viii
What is the minimum investment size under the Offer?	Applications under the Offer must be for a minimum of \$2,000 worth of Shares (10,000 Shares) and thereafter, in multiples of \$500 worth of Shares (2,500 Shares).	Section 2

Question	Summary	More Information
<p>Are there any conditions to the Offer?</p>	<p>The Offer is conditional on:</p> <ul style="list-style-type: none"> (a) the Minimum Subscription to the Offer being reached; and (b) ASX granting conditional approval for the Company to be admitted to the Official List; and (together, the “Conditions”). <p>The Offer will only proceed if all Conditions are satisfied.</p>	<p>Section 2</p>
<p>Will the Company be adequately funded after completion of the Offer?</p>	<p>The Directors are satisfied that on completion of the Offer, the Company will have sufficient working capital to carry out its objectives as stated in this Prospectus.</p>	<p>Section 2</p>
<p>Where can I find more information?</p>	<ul style="list-style-type: none"> (a) By speaking to your stockbroker, solicitor, accountant or other independent professional adviser; (b) By contacting the Company Secretary, on 9623 5399; or (c) By contacting the Share Registry on 1300 288 664 (d) By contacting the Lead Manager, Mr Justin Gong, Corporate Associate on +61 9375 0101 or justin.gong@novuscapital.com.au. 	

2. DETAILS OF THE OFFER

This Section 2 is intended as an introduction and not as a summary of this Prospectus. It should be read in conjunction with the remainder of this Prospectus.

2.1 The Offer

Prospectus for the issue of 25,000,000 **New Shares** to be offered for subscription at \$0.20 cents each to raise \$5,000,000 (**Minimum Subscription**) with provision to accept up to a further 10,000,000 New Shares at \$0.20 cents each to raise a further \$2,000,000 (**Maximum Subscription**).

All New Shares offered under this Prospectus will rank equally with the existing Shares on issue. Please refer to [Section 12](#) for details of the rights attaching to the Shares.

Please refer to [Section 15](#) for details on how to apply for New Shares under the Offer.

2.2 Minimum and Maximum Subscription

The Minimum Subscription is for the issue of 25,000,000 New Shares to be offered for subscription at \$0.20 cents each to raise \$5,000,000.

The Maximum Subscription is for the issue of an extra 10,000,000 New Shares (35,000,000 New Shares in total) at \$0.20 cents each to raise a further \$2,000,000 being a total maximum subscription of \$7,000,000.

None of the New Shares offered under this Prospectus will be issued if Applications are not received for the Minimum Subscription. Should Applications for the Minimum Subscription not be received within three months from the date of this Prospectus, the Company will either repay the Application Monies (without interest) to Applicants or issue a supplementary prospectus or replacement prospectus and allow Applicants one month to withdraw their Applications and have their Application Monies refunded to them (without interest) as soon as practicable.

No oversubscriptions above the Maximum Subscription will be accepted by the Company under the Offer.

2.3 Purpose, and Use of Proceeds, of the Offer

The principal purpose of the funds raised via this Prospectus is to provide sufficient capital to further explore its exploration areas for further quartz deposits, to explore for other green-tech minerals such as rare earths, copper and vanadium and to secure sufficient working capital to commence mining, processing and marketing of its HPQ ore to international markets. It is intended to apply the funds raised from the offer as follows:

- Exploration
- Mining and processing
- International marketing and shipping
- Management and administration
- Public Company costs
- Costs of the Offer

These costs are detailed in the tables below:

Table 2.1: Application of Funds for Minimum and Maximum Subscription

Activity	Min: \$5m Raise		Max: \$7m Raise	
	Total AUD	%	Total AUD	%
Exploration	\$600,000	12.00	\$1,100,000	15.71
Feasibility Study	\$560,000	11.20	\$640,000	9.14
Mine Development	\$600,000	12.00	\$700,000	10.00
Mine & Process OPEX	\$550,000	11.00	\$900,000	12.87
FS Beneficiation Plant	-	0.00	\$600,000	8.57
Tenement Payment (MEM)	\$350,000	7.00	\$350,000	5.00
Sales & Marketing	\$120,000	2.40	\$180,000	2.57
Loan Repayment (yr2)	\$240,000	4.80	\$240,000	3.43
Corporate Costs	\$780,000	15.60	\$780,000	11.14
IPO Offer Costs	\$680,000	13.60	\$810,000	11.57
Working Capital	\$520,000	10.40	\$700,000	10.00
TOTAL	\$5,000,000	100.00	\$7,000,000	100.00

The Directors consider that following the completion of the Offer and raising the Minimum Subscription, the Company will have sufficient funding to achieve the objectives set out in this Prospectus for a period of at least two (2) years.

2.4 Capital Structure

2.4.1 Share Structure

Table 2.2: Capital structure of the Company at Listing if Minimum Subscription is achieved

Shares	Number of Shares	%
SHARES ON ISSUE AT DATE OF PROSPECTUS	124,592,569	82.13
SHARES ISSUED UNDER OFFER	25,000,000	16.48
SHARES ISSUED TO ICS	1,500,000	0.99
SHARE ISSUED TO NOVUS CAPITAL	100,000	0.07
SHARES ISSUED TO CEO	500,000	0.33
SHARES ON ISSUE FOLLOWING THE COMPLETION OF THE OFFER	151,692,569	100.00
MARKET CAPITALISATION @ 0.20 PER SHARE	\$30,338,513	
ENTERPRISE VALUE	\$25,338,513	

Table 2.3: Capital structure of the Company at Listing if Maximum Subscription is achieved

Shares	Number of Shares	%
SHARES ON ISSUE AT DATE OF PROSPECTUS	124,592,569	76.82
SHARES ISSUED UNDER OFFER	35,000,000	21.58
SHARES ISSUED TO ICS	2,000,000	1.23
SHARE ISSUED TO NOVUS CAPITAL	100,000	0.06
SHARES ISSUED TO CEO	500,000	0.31
SHARES ON ISSUE FOLLOWING THE COMPLETION OF THE OFFER	162,192,569	100.00
MARKET CAPITALISATION @ 0.20 PER SHARE	\$32,438,513	
ENTERPRISE VALUE	\$25,438,513	

At completion, none of the Shares held by the New Shareholders, representing 16.5% (based on the Minimum Subscription) and 21.6% (based on the Maximum Subscription) of the total issued capital on an undiluted basis, will be subject to escrow arrangements (i.e. in the opinion of the Company, the free float of Shares at the time of Listing on the Official List will not be less than 20% of Shares on issue at that time).

2.4.2 Voluntary Escrow Arrangements

By various agreements with various shareholders on various dates, Shareholders with 150,000 shares or more have agreed to escrow 80% of their holdings for 4 months; and thereafter 50% of the same cohort for 6 months. As at 10 October 2022, the last practicable date before lodgement of this Prospectus, shareholders holding 72,113,626 shares, have agreed with this arrangement. After lodgement of this Prospectus the Company will continue to procure signed escrow deeds and will endeavour to have a further 26,586,859 shares escrowed prior to the Company listing on the ASX. In total, between 61% (Maximum Subscription) and 65% (Minimum Subscription) of issued capital of the Company will be voluntarily escrowed.

2.4.3 Options

At present, there are 23,981,696 Options on issue, all of which have an exercise price of \$0.30 per Option. All these Options must be exercised by 30 June 2023 otherwise they will lapse. A further 100,000 Options were issued to Prandium Capital Pty Ltd which will have an exercise price of \$0.30 per share and a 5 year expiry date from issue. In addition, from listing there will be 500,000 options issued to the Lead Manager @ \$0.30 exercise price with a 2-year exercise date.

If all these Options were exercised, the Company would receive the sum of \$7,374,509.00

Table 2.4: Capital structure of the Company at Listing if the Minimum Subscription is achieved and all Options are exercised at Listing

Shares	Number of Shares	%
SHARES ON ISSUE AT DATE OF PROSPECTUS	124,592,569	70.68
SHARES ISSUED UNDER OFFER	25,000,000	14.18
SHARES ISSUED TO ICS	1,500,000	0.85
SHARE ISSUED TO NOVUS CAPITAL	100,000	0.06
SHARES ISSUED TO CEO	500,000	0.28
ALL OPTIONS EXERCISED	24,581,696	13.95
SHARES ON ISSUE FOLLOWING THE COMPLETION OF THE OFFER AND EXERCISE OF ALL OPTIONS	176,274,265	100.00
MARKET CAPITALISATION @ 0.20 PER SHARE	\$35,254,853	

Table 2.5: Capital structure of the Company at Listing if Maximum Subscription is achieved and all Options are exercised at Listing

Shares	Number of Shares	%
SHARES ON ISSUE AT DATE OF PROSPECTUS	124,592,569	66.71
SHARES ISSUED UNDER OFFER	35,000,000	18.74
SHARES ISSUED TO ICS	2,000,000	1.07
SHARE ISSUED TO NOVUS CAPITAL	100,000	0.05
SHARES ISSUED TO CEO	500,000	0.27
ALL OPTIONS EXERCISED	24,581,696	13.16
SHARES ON ISSUE FOLLOWING THE COMPLETION OF THE OFFER AND EXERCISE OF ALL OPTIONS	186,774,265	100.00
MARKET CAPITALISATION @ 0.20 PER SHARE	\$37,354,853	

2.4.4 Share Consolidation

In 26 August 2021, at an Extraordinary General Meeting held by the Company, Shareholders resolved, as part of the ASX listing of the Company to consolidate the Company's share capital on a 2 for 3 basis. All share capital calculations contained in this Prospectus are based on a post consolidation basis. The options on issue or to be issued are not being consolidated.

2.5 Interests of Directors and Officers in the Company.

The interest, direct or indirect, of the Directors and officers in the Shares and Options, is as follows:

Table 2.6: Interests of Directors and Officers in the Company as at date of Prospectus

Director/Officer	Note	Number of Shares	%	Number of Options	%
Dr Michael Etheridge		300,000	2.29		
Mr Campbell Jones		300,000	2.29		
Mr Michael Ivkovic	1	0	0.00		
Mr Peter Crooks	2	500,000	3.82		
Mr Hugh Dai		11,591,064	88.54	833,334	100.00
Mr Stephan Ross		300,000	2.29		
Mr Terry Grace		100,000	0.76		
TOTAL		13,091,064	100.00	833,334	

- (1) Mr Michael Ivkovic does not hold Shares or Options directly in the Company. A Related Party of Mr Ivkovic, being ICS, is entitled to be issued 1,500,000 Shares at Listing where the Minimum Subscription is achieved, Where the Maximum Subscription is met, then ICS shall be entitled to 2,000,000 Shares at Listing.
- (2) Mr Peter Crooks, the CEO of the Company will be entitled to be issued 500,000 Shares conditional on raising the Minimum Subscription and the successful listing of the Company on ASX.

2.6 Issue of New Shares

New Shares will be issued only after all Application Monies have been received and ASX has granted permission for the New Shares to be quoted and the Company is satisfied that the Offer is to proceed.

All Application Monies received before New Shares are issued will be held in a special purpose account in accordance with section 722 of the Corporations Act. Once the New Shares are issued to Applicants, the funds in the account plus any accrued interest will be received by the Company.

Application will be made for the New Shares to be granted Official Quotation by the ASX within 7 days of the date of this Prospectus. If such an application is not so made or Official Quotation of the New Shares is not granted by the ASX within three months of the date of this Prospectus or Completion does not occur, then the Company will not issue any New Shares and all Application Monies received pursuant to this Prospectus will be refunded in full as soon as practicable, without interest.

Where the number of New Shares issued is less than the number applied for, the surplus monies will be returned by cheque within three (3) Business Days of the issue of the New Shares. Where no issue is made in these circumstances, the amount tendered on Application will be returned in full within three (3) Business Days of the issue of the New Shares. Interest will not be paid on monies refunded.

The ASX takes no responsibility for the contents of this Prospectus, makes no representations as to its accuracy or completeness and expressly disclaims any liability whatsoever for any loss howsoever arising from or in reliance upon any part of the contents of this Prospectus.

The fact that the ASX may admit the Company to its Official List is not to be taken in any way as an indication of the merits of the Company or subscribing for New Shares. Official Quotation, if granted, will commence as soon as practicable after the issue of Holding Statements to Shareholders including those persons receiving New Shares.

Subject to Official Quotation taking place, issue of New Shares to Applicants will occur as soon as possible after the Closing Date, following which Holding Statements will be dispatched. Trading of the Shares on the ASX is expected to commence shortly after that date. It is the responsibility of Applicants to determine their allocation prior to any trading of the New Shares.

Applicants who sell New Shares before they receive their Holding Statements will do so at their own risk. Pending the issue of the New Shares or return of the Application Monies, the Application Monies will be held in trust for the Applicants.

2.7 ASX Restricted Securities

Subject to the Company being admitted to the ASX, the Company anticipates that certain Shares and Options on issue prior to the Listing will be classified by ASX as restricted securities and will be required to be held in escrow for up to 24 months from the Listing Date. The Company will make submissions to the ASX in regards to mandatory escrow arrangements. The Company will announce to the ASX full details (quantity and duration) of the Shares and Options required to be held in escrow prior to the Shares commencing trading on the ASX. This is in addition to any voluntary escrow outlined in [Section 2.4.2](#).

2.8 Applicants Outside of Australia

The distribution of this Prospectus outside Australia may be restricted by law.

The Prospectus does not constitute an Offer of New Shares in any jurisdiction where, or to any person whom, it would not be lawful to issue the Prospectus or make the Offer. It is the responsibility of the Applicant who is resident outside Australia to ensure compliance with all laws of any country relevant to the Application, and any such Applicant should consult their professional advisers as to whether any government or other consent is required, or whether any formalities need to be observed to enable them to apply for and be issued New Shares. The failure to comply with any applicable restrictions may constitute violation of securities law in those jurisdictions.

No action has been taken to register or qualify the New Shares of the Offer to permit a public offering of the New Shares in any jurisdiction outside Australia.

2.9 Tax File Number

An Applicant is not obliged to quote its, his or her Tax File Number (TFN). However, in the case where no TFN is quoted, the Company must deduct tax from any dividends payable (to the extent that they are unfranked) at the top personal marginal tax rate plus Medicare levy.

There are special rules relating to the quotation or non-quotation of TFNs applying to different categories of Applicants such as non-residents of Australia, tax exempt bodies, joint holders and other special categories. Applications by individuals, companies and trustees, amongst others are largely unaffected by the special rules and therefore may quote a TFN by simply completing the TFN details on the Application Forms. The above does not purport to be an exhaustive statement of the law relating to TFNs and is provided as a guide only. If you are in any doubt you should consult your professional adviser.

2.10 CHESS

The Company will apply to the ASX to participate in CHESS. On admission to CHESS the Company will operate an electronic issuer-sponsored sub-register and an electronic CHESS sub-register. The two sub-registers together will make up the Company's principal register of securities.

Under CHESS, the Company will not issue certificates to Shareholders in respect of Shares. Instead, the Company will provide Shareholders with a Holding Statement that sets out the number of Shares issued to that Shareholder under this Prospectus and their total holding of Shares in the Company.

This statement will also advise investors of either their Holder Identification Number (HIN) in the case of a holding on the CHESS sub-register or Security Holder Reference Number (SRN) in the case of a holding on the issuer-sponsored sub-register.

2.11 Enquiries in relation to the Offer

The Prospectus provides information for potential investors in the Company, and should be read in its entirety. If, after reading this Prospectus, you have any questions about any aspect of an investment in the Company, please contact your stockbroker, accountant or independent financial or property adviser.

If you have any enquiries about the Application Form, please contact the Company's Share Registry.

Enquiries from Australian resident investors relating to this Prospectus, or requests for additional copies of this Prospectus, should be directed to Terry Grace Company Secretary on +61 (02) 9623 5399 or Novus Capital on +61 2 9375 0101.

2.12 Underwriting

The Offer is not underwritten.

2.13 Commissions on Application Forms

In addition to the arrangements with the Lead Manager (as outlined in [Section 11.5](#)), the Company reserves the right to pay a commission of up to 5% (exclusive of goods and services tax) of amounts subscribed to any licensed securities dealer or Australian Financial Services Licensee in respect of valid applications lodged and accepted by the Company and bearing the stamp of the licensed securities dealer or Australian Financial Services Licensee. Payments will be subject to the receipt of a proper tax invoice from the licensed securities dealer or Australian Financial Services Licensee.

2.14 How to Apply

An Application constitutes subscribing for New Shares on the terms and conditions as contained in the Offer. An Application to subscribe for New Shares can only be made on the Application Form contained in this Prospectus.

Applications must be for a minimum of 10,000 New Shares representing a minimum investment of \$2,000 and thereafter in multiples of 1,000 Shares.

If you decide to apply for New Shares, you must:

- (a) complete the enclosed Application Form; and
- (b) pay the Application Monies by direct debit or cheque drawn on and payable at any Australian bank in Australian dollars.

An Application for Shares can be made by:

- (i) applying and paying online at www.greentechminerals.com.au. You can pay by BPay or EFT;
- (ii) completing and lodging the Application Form for New Shares contained at the end of this Prospectus; or
- (iii) completing a paper copy of the relevant Application Form which accompanies the electronic version of this Prospectus, both of which can be downloaded from www.greentechminerals.com.au.

The Application Form must be completed in accordance with the instructions set out on the back of the Application Form. An Application Form must be accompanied by a bank remittance advice or cheque in Australian dollars. Cheques must be made payable to "Greentech Minerals Limited" and crossed "Not Negotiable". Payment for the New Shares must be made in full at the issue price of \$0.20 cents for each New Share subscribed for.

You may apply online by following the instructions at www.greentechminerals.com.au and completing a BPAY® payment. Follow the instructions below to complete your payment. If you do not make a BPAY or direct credit payment, your Application will be incomplete and will not be accepted. Your online Application Form and BPAY/direct credit payment must be completed and received by no later than 5.00pm (AEDT) on the Closing Date.

Applications received by the Company that do not meet the above requirements may be refused at the discretion of the Directors.

An Application for New Shares may be accepted in full, or any lesser number or rejected by the Company. If any Application is rejected, in whole or in part, the relevant Application Monies will be repaid without interest.

Completed Application Forms with any accompanying cheques or bank remittance advices should be, at any time after the Opening Date delivered to either of the following addresses:

By Hand

Greentech Minerals Ltd
c/o Automic Pty Ltd
Deutsche Bank Tower
Level 5, 126 Phillip Street
SYDNEY, NSW 2000

By Post

Greentech Minerals Ltd
c/o Automic Pty Ltd
GPO Box 5193
Sydney NSW 2001
Ph: 1300 288 664

Website: www.automicgroup.com.au

Completed Application Forms and cheque(s)/bank remittance advice(s) must be received at the above address before 5.00pm (AEDT) on the Closing Date though investors should be aware that the Directors may close the Offer before then.

No stamp duty is payable by the Applicants in respect of the Applications.

Alternative arrangements for Wholesale/Broker or overseas investors

Application forms may be emailed to the Lead Manager Novus Capital Ltd corporate@novuscapital.com.au, stating GTM Share application in the subject line.

Payment may also be made by EFT to the Novus Capital Trust Account 2

Novus Capital Ltd. Trust Account 2
ANZ Bank
BSB 012 013
Account Number 642 023 992
BIC SWIFT: ANZBAU3M
Payment Reference – Applicant Name + GTM IPO

3. COMPANY AND HPQF PROJECT

3.1 Company Background

Greentech Minerals Limited (formerly Yilgarn Infrastructure Limited) (Greentech) or (Company), was incorporated in New South Wales, Australia in 2005 to facilitate the development of a port and rail project in Western Australia's Mid-West region on an open access, multi-user basis. Although the Company secured total funding for the project, the port and railway project was submitted by the then government to a tender process and the Company failed to win that tender.

In 2015 the Company took the opportunity to acquire 100% of an exploration area near Mount Isa in North Queensland. The Tenements are considered to be prospective for HPQ and other commodities.

The Company's business is now focused on the mining, preliminary processing and export of high purity quartz feedstock (HPQF) to one or more offtake parties that specialize in the purification and manufacture of a range of HPQ products for the solar PV, computer chip and other high-tech industries.

The Company has over the past four years spent approximately \$6.45 million, including an investment of \$2 million on the refurbishment of a small purification plant in China. A 300-tonne trial shipment of ore from the Company's tenements in Queensland, part of which was processed in that plant producing a refined HPQ product which was sold for approximately \$1,700 per tonne.

The need to commit significant new investment to upscale the plant in China, coupled with the uncertainty relating to COVID-19, saw the Company exit this joint venture in June 2021, in favour of concentrating on mining, part-processing and exporting HPQF for the immediate future.

The Company is now seeking to raise sufficient funds via an ASX listing to enable it to commence mining and production of HPQF, and then to investigate the feasibility of building a beneficiation and purification plant that would enable it to participate in higher value segments of the HPQ industry.

3.2 Project Location and Ownership

Greentech and its 100% owned subsidiary Millungera Energy Minerals Pty Ltd (MEM) hold five granted tenements comprising one Mining Lease (ML 100124) and four Exploration Permits for Minerals (EPM 19373, EPM 25894, EPM 26051, and EPM 27457) with a total area of 651km² (Figure 3.1), centred approximately 25 km west-northwest of Mount Isa in northwest Queensland. The Tenements are prospective for quartz mineralisation amenable to the production of HPQ and for other commodities including copper, gold, cobalt, vanadium and phosphate.

Both EPM 19373 and EPM 25894 were originally granted to parties other than Greentech. EPM 19373 was transferred to Greentech in September 2017 as part of a joint venture agreement with Nova Strategic Minerals Pty Ltd (Nova). In October 2016, Greentech acquired 100% of MEM, which held EPM 25894, EPM 26051, EPM 27457, and ML 100124; and these tenements (with the exception of EPM 25894 which is still held by MEM) were granted directly to Greentech. ML 100124 is granted for the purpose of mining quartz/quartzite/silica and each of the four EPMs are granted for exploration of all minerals other than coal.

In January 2018, MEM entered into a Farm-In Agreement with Multimines Pty Ltd (Multimines) in which Multimines could earn a 20% interest in EPM 25894 for all minerals other than quartz through a minimum expenditure of AUD \$65,000 and a maximum expenditure of AUD \$100,000 within six months of the start of the agreement. Multimines met this expenditure requirement and now holds a 20% interest in EPM 25894 for minerals other than quartz. Future exploration for minerals other than quartz on EPM 25894 will be funded pro rata by each party.

Details of these tenements and their obligations are provided in [Annexure B](#) (Hetherington, 2022), and are also summarised in the Independent Geologist Report (IGR) in [Annexure A](#)

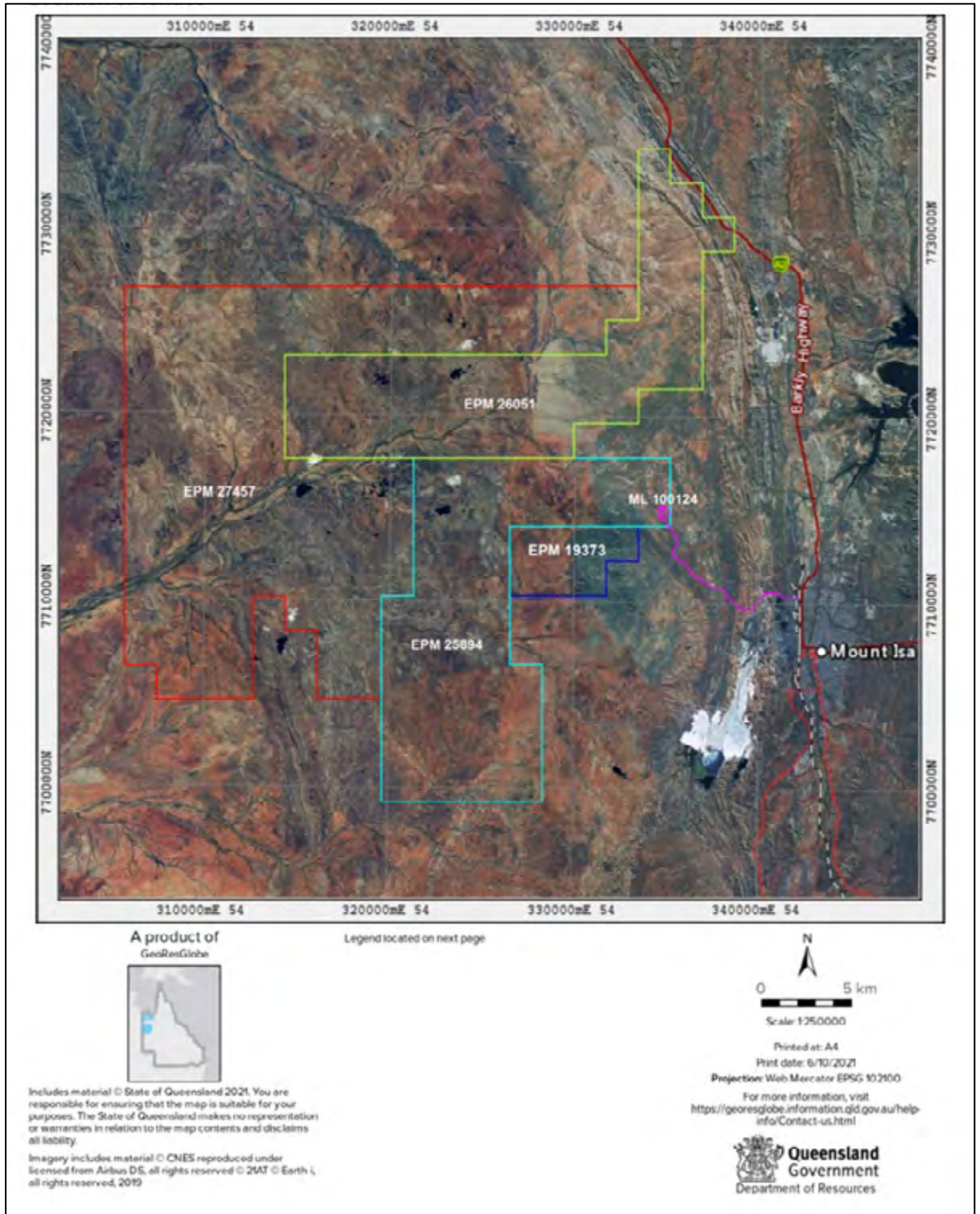


Figure 3.1. Location map of Greentech tenements over satellite image, taken from ROM Resources (2022).

3.3 Geology and HPQ Resource Estimation

In 2017 the Company commissioned ROM Resources (ROM) to prepare a preliminary JORC-compliant Mineral Resource Estimate for EPM 25894 to support an application by the Company for a Mining Lease to enable commencement of mining. On 15th August 2019, the Queensland Department of Natural Resources and Mines (DNRM) granted the Company a license to mine, initially on ML100124 which includes the May Downs quartz reefs.

In 2021, the Company commissioned ROM to prepare an upgraded resource estimate report to include additional quartz reefs. A further updated report was requested from ROM in June 2022 and received on 9 August 2022 to include the results from an additional drill program and a revised SiO₂ grade estimation procedure. This most recent report is included in this Prospectus as [Annexure C](#), and is the source for much of the geological and resource information that follows.

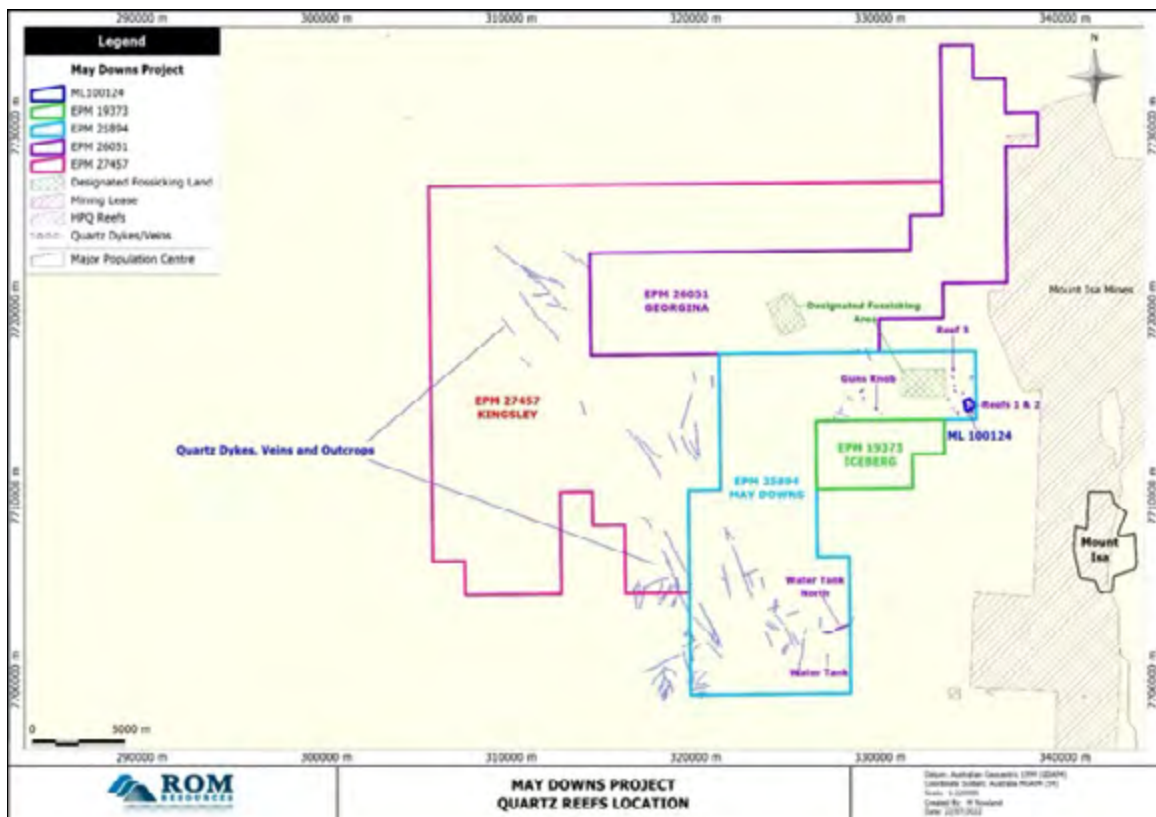


Figure 3.2. Greentech tenement outlines with larger quartz reefs mapped from airborne and satellite imagery. Reefs mentioned in the text are also identified. Taken from ROM Resources (Annexure C, Biggs 2022).

The quartz veins, also known as “reefs” or “blows” are an echelon elongated bodies that intrude the Alpha Centauri Metamorphics, the Sybella Granite and the May Downs Gneiss Complex, and are traceable in stereoscopic satellite imagery with individual strike lengths up to about 3km. About eighty (80) reefs have been mapped this way and rock chip sampling across strike has occurred at eleven (11) of the larger reefs. The rock chips have then been subjected to detailed major oxide and trace element laboratory analyses using the inductively coupled plasma mass spectrometric (ICPMS) method at Australian Laboratory Services Pty Ltd (ALS) laboratories in Australia. The results indicate an average SiO₂ content of 99.91%, with loss-on-ignition between 0.03% and 0.06% and major impurities totalling less than 500 parts per million (ppm)

The reefs rise between about 1.5m to 36m above the surrounding flattish plain and although the contacts with the metamorphic rocks are concealed at some of the sites visited, the larger reefs are about 10m to 20m wide and steeply inclined. Where the quartz extends above the ground surface along the full strike length, this tonnage has been estimated in accordance with the 2012 JORC Code



Figure 3.3. Field photograph of quartz reef from within ML 100124. Taken by Hugh Dai, Executive Director of the Company.

with a total Indicated Mineral Resource of 160,800t of quartz. Measured wireframes were generated around the bulk sample sites and are surrounded by, but separate from, the Indicated wireframes. A total of 71,500t of Measured Mineral Resources was estimated. The combined Measured and Indicated Mineral Resources totalling 232,300 tonnes of quartz are all above the surrounding land surface.

If the reef is assumed to extend a short distance below the ground surface (distance varies per reef between 5m- 30m), then there is an additional estimated Inferred Mineral Resource of quartz of approximately 155,000t. These resource estimates refer to only those reefs within easy road access, although many more exist in less accessible terrain.

The Mineral Resource Estimates from the 11 reefs that have been sampled and whose surface extents have been mapped are summarized in Table 3.1, which is taken from the IGR (Derisk, 2022).

Table 3.1. HPQ Resource Estimates of reefs from ROM (2022); after IGR Table 8-2 (Derisk, 2022, p.33).

Prospect	Tenement	Measured (kt)	Indicated (kt)	Inferred (kt)	Total (kt)	SiO ₂ (%)
Reef 1	ML 100124	5	1	3	10	99.93
Reef 1A	ML 100124	-	<1	<1	1	99.96
Reef 2	ML 100124	9	4	5	19	99.96
Reef 3	EPM 25894	20	19	12	51	99.95
Reef 3A	EPM 25894	-	7	5	12	99.95
Reef 4	EPM 25894	-	3	2	4	99.96
Reef 6	EPM 25894		<1	<1	1	99.96
Guns Knob	EPM 25894	38	78	6	121	99.96
Reef_WT	EPM 25894	-	<1	2	2	99.96
Reef_WT_N1	EPM 25894	-	12	30	42	99.96
Reef_WT_N2	EPM 25894	-	36	89	124	99.96
TOTAL		72	161	155	388	99.96

Note:

1. Competent Person for estimation and reporting – Mark Biggs
2. Derisk has rounded resource sub-totals to reflect the accuracy of estimates, and this may lead to rounding errors.

3. No cut-off criterion for SiO₂ content was applied.
4. SiO₂ contents ignore determination of loss-on-ignition (LOI), which is typically between 0.03 and 0.06%

In addition to the Resources listed above, ROM has estimated from the 69 reefs an Exploration Target based on actual exploration completed to date. ROM reported a range from 160,000 to 540,000 tonnes of quartz at an estimated grade range of 99.0 – 99.9% SiO₂ (Biggs, 2022).

In June and July 2022, the Company took advantage of the short-term availability of a diamond drilling rig in the area to drill six short core holes beneath two of the reefs within ML 100124 (Reefs 1 and 2). The drill holes were designed to test for extensions of the quartz reefs beneath the lower limits of the estimated Mineral Resources in Table 3.1. The holes beneath Reef 2 indicated that the drilled section of reef thinned at 5 to 10m below the surface, limiting additional resources there. However, the holes beneath Reef 1 intersected down-hole lengths of up to 8m of visually clean quartz (e.g., IGR, Figures 8.2, 8.3), indicating that this reef continues at least 10m below the surface. The Company considers that this variability in subsurface extent of the reefs is consistent with geological understanding, and that the drill results provide confidence that the Mineral Resource of some of the 11 reefs already estimated will increase as the Company explores further.

Prospectivity for Other Commodities

The area covered by the Company's exploration tenements had been previously explored under other licenses by a number of companies, in particular MIM Resources Development Pty Ltd, a wholly owned subsidiary of Mount Isa Mines Ltd. Exploration was mainly for copper, with some interest in vanadium, uranium and phosphate.

Greentech has completed a desktop review of previous exploration and collated all available geochemical and geophysical data covering the tenements. Specific assessments of the prospectivity of the tenements for base metals, particularly copper, and phosphate were completed.

In January 2018, MEM entered into a Farm-In Agreement with MultiMines Pty Ltd (MM) in which MM could earn a 20% interest in EPM 25894 for all minerals other than quartz (and coal) through a minimum expenditure of AUD \$65,000 and a maximum expenditure of AUD \$100,000 within six months of the start of the agreement. Greentech was advised that MM met this expenditure requirement and now holds a 20% interest in EPM 25894 for minerals other than quartz. The results of the MM exploration activities are summarized in the IGR (Derisk, 2022, section 9.1). Future exploration for minerals other than quartz on EPM 25894 will be funded pro rata by each party.

Chalkos Metals Limited (Chalkos) holds the tenements immediately to the east and south of the Greentech tenements, and considers they are prospective for copper. Outcropping copper expressions are found across the tenements, most notably in association with pegmatite intrusions or with variably iron-oxide altered metabasalts of the Eastern Creek Volcanics. Chalkos has defined seven copper targets to date (chalkosmetals.com.au/mount-isa-project/) and has recently completed a drilling program reporting encouraging results, although assays are not yet available.

Greentech is particularly encouraged by the Chalkos report of over 30 metres of intensely iron-oxide altered rock containing visible copper minerals in a drill core from about one km east of our tenement boundary. The appearance of the drill core (Chalkos Metals Limited, Announcement, 21 June 2022, Figures 1 and 2) is reminiscent of iron-oxide copper gold (IOCG) mineralisation elsewhere in the Mount Isa district.

Greentech considers that the host rocks for the copper mineralisation and the magnetic iron-oxide alteration identified by Chalkos extend into the Greentech tenements (see purple areas on magnetic image in Figure 3.4), confirming that EPM 19373, the northeastern parts of EPM 25894 and easternmost EPM 26051 are prospective for copper mineralisation. The Company plans to follow up on this exploration potential soon after IPO.

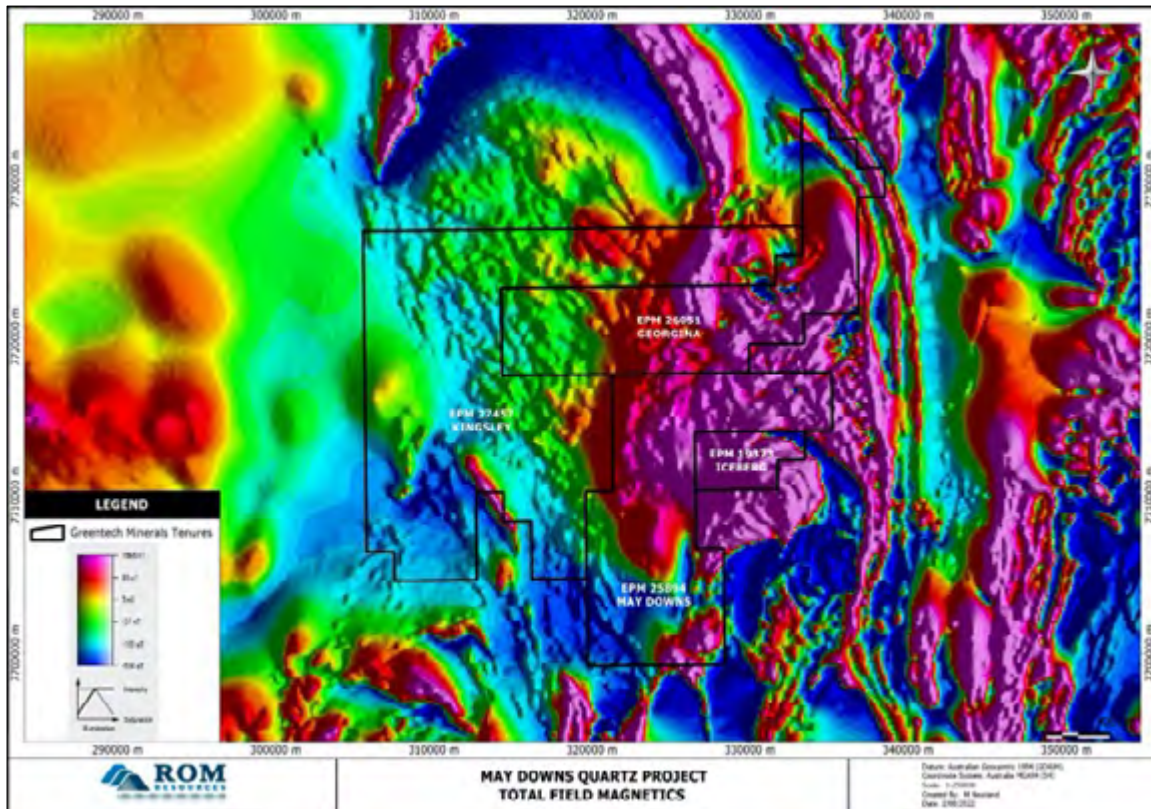


Figure 3.4. Total Magnetic Intensity Image over the Greentech tenements and surrounds (ROM, 2022, Figure 6 after Milligan, Franklin, Minty, Richardson, & Percival, 2010).

3.4 Bulk Sampling and Test Work

The Company undertook two bulk sampling programs, the first in March 2016 comprised 68 tonnes taken from Reefs 1, 2 and possibly 3 at the May Downs project area, and the second totalling about 500 tonnes in June 2019 at the Iceberg Reef within the then current ML 100075 (in EPM 19373). The earlier bulk sampling and some of its outcomes are described and discussed in [Annexure C](#) (Biggs, 2022), and the Iceberg sampling is covered in the IGR (Derisk, 2022).

The Chinese assay data from samples collected within EPM 25894 is reported in the annexed Resource Estimate Report ([Annexure C](#); Biggs, 2022, Appendix 3, Table A3-4).

In June 2015, Hugh Dai (Greentech Executive Director) undertook sampling of outcropping quartz from the May Downs reefs for assessment by several potential processing businesses in China. The Company has assay data from 5 of these samples in Table 3.2. These were analysed and subject to some initial cleaning and processing by Jiangsu Silicon Materials Technology Co Ltd. (JYSMT). Four of the five assays did not include SiO₂ values, and none reported loss-on ignition (LOI) values.

Table 3.2. Assay data reported by the National Center of Quality Supervision and Inspection on Deep Processing Silicon Products from the June 2015 samples.

Element	Quantity	Reef 1 Sample 1	Reef 1 Sample 2	Reef 2 Sample 1	Reef 2 Sample 2	Acid leached sample from Reef 2 Sample 2
Aluminium	ppm	12.68	18.16	47.65	37.66	8.52
Calcium	ppm	1.03	1.19	2.90	2.45	0.54
Chromium	ppm	0.02	0.03	0.09	0.02	0.03
Copper	ppm	0.09	0.03	0.26	0.19	0.05
Iron	ppm	0.86	0.62	2.36	1.98	0.40
Potassium	ppm	1.21	0.76	1.72	1.27	1.28
Lithium	ppm	0.17	0.62	0.40	0.47	0.56
Magnesium	ppm	0.29	0.32	0.38	0.35	0.16
Manganese	ppm	0.02	0.11	0.13	0.10	0.01
Sodium	ppm	1.98	1.41	17.05	11.38	3.52
Boron	ppm	n/a	n/a	n/a	n/a	0.06
Phosphorous	ppm	n/a	n/a	n/a	n/a	0.74
Nickel	ppm	n/a	n/a	n/a	n/a	0.03
Titanium	ppm	n/a	n/a	n/a	n/a	0.95
Total	Parts per million	18.35	23.25	72.94	55.87	16.78

The treatment in China of Reef 2 (sample 1) and an acid-leached product from that sample were described in a proposal the Company submitted to the Queensland Mines Department in late 2015 to allow limited bulk sampling of reefs in the May Downs area (Pustahya, Dai and Pustahya, 2015). It appears that the untreated sample (Reef 2, Sample 1 in Table 3.2) was reported as having an SiO₂ content of 99.97%, which implies a LOI of just over 0.02%. After crushing and washing, this sample was subjected to leaching in “a percolating hydrochloric solution” and then water-washed, dried and re-assayed, producing the significantly lower impurity contents in the right-hand column of Table 3.2. A footnote to the assay sheet from the Chinese laboratory indicated that these impurity levels are equivalent to an SiO₂ content of 99.997%.

Despite the limited documentation of the treatments applied to these and other samples sent to Chinese processing companies, the Company considers that the reported assays are very encouraging.

3.5 Defining and Reporting HPQF and HPQ Grade / Quality

The internationally accepted standards for assaying high quality quartz are based upon:

- determination of the critical individual impurity elements by some form of spectroscopic analysis; modern mass spectrometric techniques can measure 50 or more elements with very low detection limits and very high precision, and
- separately determining the water (plus other vapour phases) content by loss-on-ignition (LOI). LOI is determined by heating the sample to a high temperature, typically 1,000 °C, and comparing the weights of the sample before and after heating.

The total proportions of the impurity element contents and LOI are then subtracted from 100% to determine the SiO₂ content. It is simply not possible to directly measure SiO₂ contents above about 99% with the required level of precision, and so the international standard for high purity silica analysis is the “difference method” described above.

In [Section 5](#) of the Prospectus, we outline the key factors of the global HPQ market, including the generally accepted grades for a range of HPQ purities produced by the processors and refiners of HPQF. The different HPQ grades range from 99.99% to 99.999% SiO₂, commonly with upper limits for key deleterious elemental impurities. There are no similar standards for HPQF, but a rule of thumb, confirmed by offtake discussions with potential offtake parties, is that the feedstock should have SiO₂ greater than 99.9%.



QUARTZ ORE

HPQ Feedstock
99.90% - 99.99% SiO₂



SAND

Refined HPQ Sand
99.99%-99.999% SiO₂



CRUCIBLE

Crucible for growing
silicon crystals

So what has the Company learnt about its feedstock quality, how we might pre-process it prior to shipping, and its likely attractiveness to offtake parties?

1. All of the assay data to date indicates that, by careful and selective mining, we believe the Company can consistently achieve a run-of-mine (ROM) grade equal to or greater than 99.9% SiO₂, which implies less than 1,000ppm total impurities including LOI.
2. The ALS assays consistently report LOI of 0.03 to 0.07%, or 300 to 700ppm, averaging about 0.05% (500ppm). The reported Mineral Resource grades after removal of LOI average 99.95%, with the balance of 500ppm being the total of other impurity elements.
3. The Chinese assays do not report LOI and report SiO₂ for only a few analyses, reflecting the major concern of the potential buyers with the elemental impurities. They understand that the high temperature treatment steps in their purification processes will remove all or most of the LOI. The total impurity elements (without LOI) in the Chinese data almost all total around 100ppm or less (see Table 3.2 above for examples).
4. The difference between the Australian Laboratory levels and those reported from Chinese laboratories can be explained by the different sampling methodologies applied to the two sets of samples. The Australian Laboratory data came from samples collected by geologists, including the independent resource geologist, by aggregating representative across- and along-vein samples, with the objective of determining average quartz composition. The Chinese assays, in contrast, were preferentially selected for visual indications of quartz purity and translucency (Greentech internal communication).
5. This has important implications for how the Company will mine and pre-process our feedstock, and potentially for the price the Company expects to receive from offtake parties. Greentech has already sent samples to two European facilities so that we can better understand the improvement in its HPQF grade that it can achieve from a combination of relatively inexpensive pre-processing treatments including some or all of crushing to specific sizes, water washing, light acid washing, and optical and/or laser sorting. This is discussed further in [Section 4](#) of this Prospectus.

4. BUSINESS PLAN

Greentech is seeking to raise funds under this Prospectus and undertake an ASX listing to progress mine development, preliminary processing, offtake and first sales of its HPQF product from its 100%-owned Mt Isa Project. It also plans to apply for additional Mining Leases and commence exploration of its tenements for other commodities, and to investigate the feasibility of building a full processing and beneficiation plant to enable the production of the more valuable HPQ products.

4.1 Mine Development and Mining Plan

Subject to technical and financial studies being completed satisfactorily within the first 6 to 12 months after listing, the Company plans to commence mining quartz within its granted Mining Lease (ML100124). It has commenced mine planning with the knowledge and experience of two bulk mining campaigns being already completed. In addition, the Company has commenced discussions with a Mount Isa based mining and civil contractor that undertook the bulk mining trials.

Prior to commencement of commercial scale mining, the Company will undertake some further trial mining, on-site coarse crushing, and pre-stripping of the vein margins. This will enable Greentech to complete a detailed mine plan and to refine costings to effectively complete an early stage feasibility analysis. We will also commence site preparation works, including an access road upgrade.

The mining is expected to commence at Reef 2 within May Downs ML100124. Because most of the resource stands above the surrounding plain and the eventual mining rate is proposed to be low, the Company plans to undertake campaign mining using a mobile rock-breaker, and an excavator to move the lump ore to separate stockpiles on site on the basis of visual purity assessment. This method was tested successfully during trial mining at Reef 2 in 2017. (Figure 4.1)



Figure 4.1. Mobile rock-breaker during the 2016 bulk-sampling at Reef 2, May Downs project (left) and some of the stockpiled “clean” quartz (foreground right).

4.2 Processing Plan

Greentech’s processing plan is to develop an HPQF product with less than 100ppm total impurities, not including LOI (see [Section 3](#) for details). We are in the early stages of refining the processing plan but have two important trials currently being undertaken by international specialists in quartz processing.

1. A 150kg sample of as-mined, representative quartz was air-freighted to Dorfner ANZAPLAN in Germany to assess the response of our HPQF to the full range of processing and beneficiation stages, including mechanical, physical, chemical and high temperature treatments. They will also use bench-scale beneficiation to determine the end uses for which our quartz is potentially best suited. We expect that outcomes from this test work will assist with optimising our own early-

stage processing options in Mount Isa, and to better understand how our quartz responds to the full range of beneficiation technologies used by HPQ producers for use in offtake negotiations.

- Several samples of different visual purity totalling 40kg were sent to the German mineral testing laboratory of TOMRA, one of the world's leading producers of optical, laser, magnetic and electrostatic sorting machines. TOMRA also has a mineral sorting research capability in Sydney, Australia. The main aim of this work is to assess the capability and cost / benefit implications of using optical and/or laser sorting as part of our first-stage processing capability at Mount Isa.

The Company expects to receive the results of this test work during Q4 2022 and will then be able to complete a feasibility analysis of processing options and to finalise its beneficiation plan. Greentech

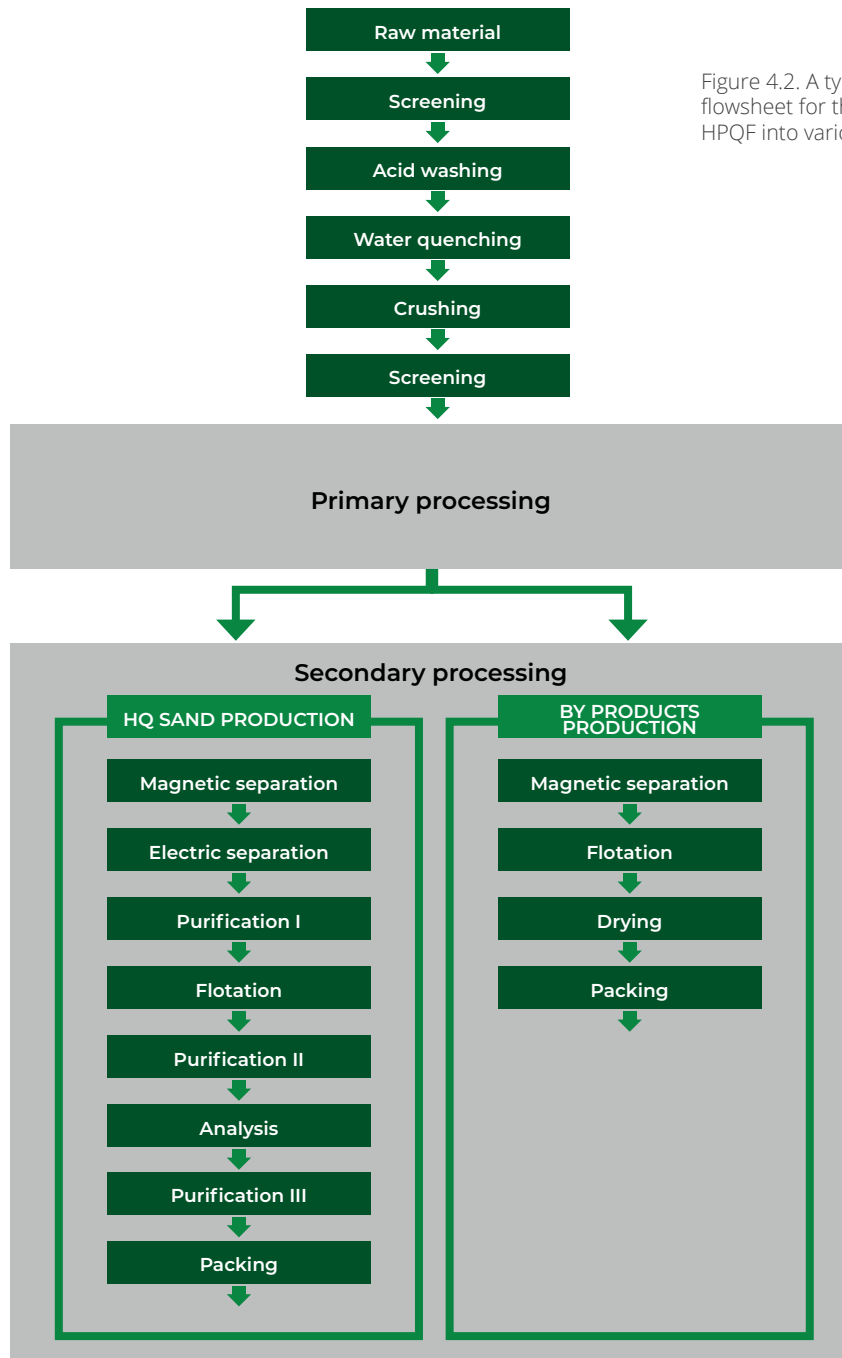


Figure 4.2. A typical processing flowsheet for the beneficiation of HPQF into various grades of HPQ.

Source: feasibility study for HPQ processing plant prepared by Sino Steel Technology Development Co Ltd

has commenced negotiations with a Mount Isa based contractor to utilise land that they have on the outskirts of town to locate beneficiation and processing facilities.

Greentech's processing plan would involve developing most or all of the "Primary Processing" steps in Figure 4.2 with the potential addition of an optical and/or laser sorting stage. Should the Company succeed in building a profitable business from production and sale of our primary processed HPQF, our longer-term plan is to build a "Secondary Processing" plant and enter the higher value HPQ supply business.

Greentech's objective is to be the supplier of choice from a stable jurisdiction for high-quality HPQF to a range of refiners and HPQ producers and thereby to command a price premium for our product.

4.3. Marketing Plan

The global HPQ market is described in detail in [Section 5](#). It is a tightly held, closed industry in which contracts between HPQF suppliers and, HPQ processors and producers are individually negotiated and priced. In addition, individual processors commonly tune the individual impurity profiles of their refined HPQ to deliver to individual contracts with silica and silicon manufacturing companies. For example, we understand that Sibelco, the world's largest supplier of HPQ, has as many as eight different product lines with different impurity profiles for different customers and technologies.

As detailed elsewhere in this Prospectus ([Section 2](#) and [Section 11.14](#)), Greentech completed a preliminary offtake agreement in 2017 with Jiangsu Yangshan Silicon Material Technology Co Ltd. (JYSMT), a private HPQ processing and production company. JYSMT is one of the processing firms that tested Greentech HPQF from the bulk sample trial and, the preliminary offtake agreement resulted from that test work. JYSMT confirmed by letter in May 2022 that they consider the original offtake agreement to still be valid, despite Greentech not meeting the original delivery schedule. Further, JYSMT indicated that they are currently paying US\$700 per tonne to Indian HPQF suppliers for feedstock of the quality required to produce HPQ for the crucible market.

The Company has also previously provided samples to Jiangsu Pacific Quartz Company Limited (Pacific Quartz), China's largest HPQ processor. Following test work on those samples in 2020, Pacific Quartz expressed interest in entering a long-term offtake agreement. An agreement with Pacific Quartz was entered into, but has been delayed due to the COVID-19 pandemic. However, the Company intends to re-invigorate (to the extent possible) an agreement with Pacific Quartz following Greentech's capital raising and ASX listing.

Once Greentech has received the results of the Dorfner ANZAPLAN and TOMRA test programs Greentech will progress its mining and processing plan. The Company then plans to engage with JYSMT, Pacific Quartz and other potential offtake partners throughout Asia and Europe to better understand their HPQF quality requirements. The potential offtake partners will provide price ranges they would expect to pay for Greentech feedstock based on the test and assay results of the quartz.

4.4. Exploration Plan

Should Greentech succeed in raising the funds under this Prospectus, the Company will primarily be devoted to mine development, processing and marketing of its HPQF in the two years following listing. However, it will commit to starting work on two exploration initiatives -

1. The Company will undertake further exploration, including planned drilling at its Water Tank and Gunn's Knob HPQF Reefs as the basis for applications for mining licences over those deposits. These are the two largest known Mineral Resources in the Company's inventory and will underpin its long-term production capability. Application for these mining licences will also require some additional environmental studies and negotiations with landholders and native title rights holders. It is expected that it will be approximately two years before those licences are able to be granted.
2. The Company will continue to assess its broader EPM portfolio for other commodities. The Board is particularly encouraged by recent drill results announced by our eastern neighbour,

Chalkos Metals Ltd (see [Section 3.3](#)), and by Cooper Metals to the east of Mount Isa (Cooper Metals Limited, ASX: CPM, Investor Presentation, 20 July 2022). The results from these companies have indicated that there is potential for iron-oxide copper-gold (IOCG) mineralisation in the broader region. The regional geophysical coverage suggests that the prospective area extends into the eastern parts of EPM's 19373, 25894 and 26051 ([Section 3.3](#)). The program will commence with reprocessing of the available geophysical data and the potential acquisition of additional geophysical surveys, especially in areas of thin Cambrian and younger cover that may have obscured surface indications of copper mineralisation.

4.5. Longer-Term Strategy

The recent appointment of Mr Campbell Jones to Greentech's board is particularly important to its longer-term strategic ambitions. Campbell brings over 20 years of experience at senior management levels in Australian and international industrial minerals businesses, including as President and CEO of one of the largest companies in the global silica sand and HPQ space. Apart from bringing to the Company a wealth of management, governance and process engineering expertise, Campbell will be critical to Greentech's broader growth ambitions, initially in two main areas.

1. Once it has established a profitable business supplying HPQF to one or more HPQ processing offtake partners, Greentech has a longer-term vision to build a processing and beneficiation plant in north Queensland to process its own feedstock and potentially that of other regional producers. As an outcome of its prior business partnerships in China, which included part-ownership of an HPQ processing plant, the Company has know-how and other intellectual property that will provide useful input into a scoping level study to build its own HPQ plant in Australia. This will include engagement with State and Federal government agencies and, potential business partners in the green industries sector.
2. Although the global HPQ business is financially attractive with good margins for the major producers, it is not large with projected annual revenues of less than US\$500M (Exawatt and ANZAPLAN, 2021). In addition, approximately 70% of the global HPQ business is controlled by two companies, Sibelco and QuartzCo, in which they have their own feedstock sources and from which all of their refined HPQ product is produced. The attractive growth forecast by Exawatt and ANZAPLAN, 2021 out to 2030 does provide an opportunity for new entrants such as Greentech. Indeed, Exawatt and ANZAPLAN state that the "dramatic increase in HPQ demand will require significant expansions in HPQ mining and processing capacity. In order to achieve our forecasted HPQ shipments by 2030, production capacity is required to increase by approximately 40% by 2030". However, the small overall market for HPQ products is a limit to growth. The Company therefore has ambitions beyond the HPQ sector, and will undertake a strategic review of the full range of opportunities in the industrial minerals space.



HPQ Feedstock – Greentech Today



Refined HPQ – Greentech's Future?



NB The above photo does not represent an asset of the Company.

HPQ Market Growth is in Solar PV Components

5. HIGH PURITY QUARTZ – DEFINITION, APPLICATIONS & GLOBAL MARKET

5.1. What is High Purity Quartz?

The term High Purity Quartz, also known as HPQ, is reserved for quartz material that satisfies exacting quality requirements for use in several critical applications in the solar photovoltaic, semiconductor, optical fibre, specialist glassware and optics industries. HPQ feedstock (HPQF) deposits can be defined as naturally occurring quartz in economically viable quantities that are amenable to beneficiation and purification to meet those quality requirements.

The main quality determinants include a very low level of impurities, an application-dependent particle size distribution, and melting behaviour that are acceptable for downstream manufacturers. However, and most importantly, commercially the term HPQ is reserved for processed quartz material that satisfies those exacting standards. None of the products mentioned above can be manufactured without a reliable supply of consistent quality HPQ and HPQF. As detailed in Section 5.5 below, the rapidly growing solar PV market is predicted to require significant new sources of supply over at least the remainder of this decade.

5.2 The Global HPQ Supply Chain

The HPQ supply chain comprises the following components:

- Miners who supply the HPQ feedstock (HPQF), commonly after some basic crushing, screening and washing. Greentech intends to participate in this part of the supply chain for at least the next two years. It will also investigate the feasibility of building a processing plant to enable it to participate in the next step and become a processor.
- Processors who purchase feedstock from miners and apply multistage purification processes to deliver HPQ at greater than 99.99% SiO₂ concentration to fabricators.
- Fabricators who produce a range of end-products, mainly for the semi-conductor, PV solar panel and specialist glassware industries. Most of the processed HPQ by volume and by value is fabricated into silica crucibles used to grow extremely pure silicon metal crystals and ingots for cutting into the silicon wafers that are the critical components of semi-conductors and photovoltaic cells.

Approximately 70% of the global HPQ supply market is controlled by two companies, Sibelco and QuartzCo, who mine feedstock from their own mines at either end of a single alaskite pegmatite at Spruce Pine, North Carolina in the United States. Both these companies have their own processing facilities and produce a range of very high-purity quartz sand and powder grades to fabricators, but do not undertake fabrication themselves. The balance of the HPQ industry comprises processors and processor-fabricators in Asia, Europe, Russia and Canada. The largest of these is Pacific Quartz in China, which purchases all its feedstock from small miners and produces processed HPQ products as well as undertaking some fabrication of end-products. Pacific Quartz has tested some Greentech HPQF, and the companies had a preliminary offtake agreement which has lapsed (Refer to [Section 4.3](#) for more information).

Greentech has discovered, assayed and had preliminary processing undertaken that indicates that it has the potential to deliver significant quantities of HPQ feedstock into the global HPQ processing market. As the geopolitical landscape changes, additional potential suppliers to this market sector become more critical. Greentech intends to commence operations by mining and undertaking basic physical processing (e.g., crushing, comminution, sorting and/or leaching) of HPQ feedstock (HPQF).

5.3 HPQ Specifications and Prices

There is no globally accepted High Purity Quartz (HPQ) specification. However, Sibelco markets its range of products under the brand name IOTA. IOTA categories are defined based on grade, application, purity, and individual elemental contaminations, and several HPQ classifications for benchmarking purposes are used internationally. A common categorization method is to use SiO₂ content as a measure of HPQ quality as follows (Exawatt and ANZAPLAN, 2021).

- Low-grade HPQ is generally considered to be material of purity greater than 99.995% (or 50 ppm of impurities);
- Medium-grade material starting at 99.997% (30 ppm) impurities; and
- High-grade HPQ starting at 99.999% (10 ppm) after full processing.

IOTA has set a high purity benchmark for the rest of the HPQ market. It contains 20 ppm per million or less as a standard, equating to >99.998% of SiO₂. The IOTA brand is the industry standard for high-quality fused quartz products. Its highest-quality grade used in significant volumes, IOTA6, is a chlorinated product that commands the highest prices of all HPQ types and is required for semiconductor crucibles, quartz glassware and optical fiber cladding. Sibelco's higher-grade HPQ products such as IOTA8 are only produced in limited quantities.

The table below has been compiled by Greentech from third-party sources, Exawatt and ANZAPLAN, 2021.

HPQ SAND	HPQ sand is high purity quartz silica with at least 99.99% (<100 ppm impurities). This sand is used in high purity epoxy fillers, ceramics, specialty glass and moulding compounds. Pricing is US\$1,000 to US\$2,000 per tonne.
GRADE I	Grade I HPQ includes high purity quartz having SiO ₂ concentration >99.99% but <99.995% (50 to 100 ppm impurities). HPQ considered in the scope of Grade I is equivalent to the IOTA basic standard. Some of the common applications of Grade I HPQ include halogen and mercury lamps, optical glass, and custom production applications such as fused quartz tubing and ingots. Pricing is ~ US\$4,000 to US\$6,000 per tonne.
GRADE II	Grade II HPQ includes high purity quartz having SiO ₂ concentration >99.995% but <99.998%. HPQ considered in the scope of Grade II is equivalent to IOTA 4 and 5 standards. Some of the common applications of Grade II HPQ are monocrystalline crucibles for solar applications, high-quality fused glass, tubing, and quartz-ware. Pricing is ~ US\$6,000 to US\$9,000 per tonne.
GRADE III	Grade III HPQ includes high purity quartz having SiO ₂ concentration ≥99.998%. HPQ considered in the scope of Grade III is equivalent to the IOTA 8 standard. Some of the common applications of Grade III HPQ are semiconductor grade crucibles and high-end solar and semiconductor applications. Pricing is ~ US\$8,000 to US\$12,000 per tonne.

Please note that the above table is a guide only and illustrative of what prices the buyers of the Company's HPQF product may achieve once HPQF has been significantly processed. The Company cannot produce these products at present because it does not have the relevant beneficiation and purification assets.

The naturally occurring feedstock (HPQF) must be quartz of a sufficient grade and an amenable impurity profile to enable cost-effective upgrading to an IOTA or similar standard of specifications. Deposits of quartz that meet these specifications are very rare. The processing required to produce a particular HPQ grade depends on the amount and type of impurities present. It may include crushing, screening, flotation, acid washes, magnetic separation, and/or other physical, chemical, and thermal techniques.

The price that Greentech can expect to receive for its HPQ feedstock from a processor will be determined by its inherent impurity content, the content of specific deleterious elements, some of its physical characteristics, the cost of processing to the required grade and the processor's margin.

5.4 HPQ Purification Process

The processing required to produce HPQ depends on the amount and type of impurities present and may include crushing, screening, flotation, acid-washes using hydrochloric and/or hydrofluoric acid, magnetic separation and/or other physical, chemical, and thermal techniques, as follows.

- ✓ Comminution, to yield the appropriate particle size distribution. May also include optical and/or laser sorting
- ✓ Magnetic separation and/ or flotation, which remove the majority of trace minerals, usually leaving >99.99%-pure SiO₂
- ✓ Fine grinding (some customers require the particle size to be finer than normal for use in specific processes such as flame fusion, or because they require higher purity but at a lower cost than via more-expensive chlorination)
- ✓ Leaching in acid, which may improve SiO₂ purity from 99.99% to 99.997% by removing surface impurities
- ✓ Calcining, which reduces bubbles in the end product by burning off any organic contaminants, bursting liquid or gaseous inclusions (releasing their contents) and reducing OH content (most of the LOI, see [Section 3](#) and [Section 4](#)), which improves viscosity
- ✓ Chlorination, which reduces impurities inside the quartz grain, allowing the impurities to diffuse through the grain until they reach the surface, where they form a halide and are removed from the quartz with the gas stream, resulting in purity as high as 99.999% (<10 parts per million impurities).



It is Greentech's intention to produce HPQ feedstock that attracts a premium price from one or more processing offtake partners. Apart from the inherent quality of its in-ground feedstock, it plans to achieve that by a combination of selective mining and low-cost but effective front-end processing that may include comminution (crushing), sorting and acid or water washing.

5.5 HPQ Applications and Market Demand Growth

The market for HPQ is dominated by four categories:

1. crucibles for growing silicon metal ingots and crystals for solar PV
2. crucibles for semiconductor silicon crystal growth
3. specialist quartz glassware for use in semiconductor and solar PV.
4. specialist lighting applications

Two additional markets – optical fiber and optics (high-quality lenses) – make up most of the remainder.



Semiconductors

- HPQ is used in the fabrication of crucible and glassware used in the production of silicon crystals from which semi-conducting silicon wafers are cut.
- Semiconductor usage of HPQ used to dominate the industry, but it is being overtaken by solar PV applications.



Optical Fiber

- The core of optical fibers is usually made from synthetic silica, while the transparent cladding material can be made from glass of natural high purity quartz



Solar

- High purity quartz is used in the fabrication of photovoltaic cells, tubes, and other hardware that are used in the photovoltaic industry.
- This is projected to be the highest growth part of the HPQ demand, doubling by 20



Lighting

- The glass used in halogen lamps must have excellent optical transmission properties and the ability to withstand extreme temperatures and thermal shocks without getting deformed.
- The tungsten filament glows at a temperature of 2500°C, only a few mm away from the glass wall. Only HPQ glass can be used for this application.

NB The above photos do not represent assets of the Company.

Greentech has acquired HPQ market research reports from Stratum Resources (2020) and Exawatt and ANZAPLAN, 2021, and these are the sources of much of the information in this section. We note that despite the detail in these reports, they differ significantly in their estimations of both current market size and future growth, although they agree on the strong growth potential of the solar PV market in particular. In Greentech's opinion, the differences in market size estimations are a reflection of both the opacity of the market and differences in accounting for HPQ supply and demand across parts of the market, especially in the somewhat lower purity HPQ sand portion of the market.

According to Exawatt and ANZAPLAN, 2021, solar PV crucibles (32% of 2021 shipments) and lighting (29%) are the two largest markets in volume terms. These are followed by glassware, including fibre optic components, (24%) and semiconductor crucibles (9%). However, glassware is currently the largest HPQ market in value terms (37% of 2021 revenue, vs 27% for solar crucibles and 19% for semiconductor crucibles), due to the higher quality requirements (and hence high HPQ price) of the semiconductor applications in which quartz glassware is commonly used. Due to the lower purity requirements for lighting, this category is expected to account for just 9% of HPQ revenues in 2021.

Projections of future demand for HPQ is being mainly driven by the following.

1. Rise in demand from the semiconductor industry

High purity quartz is utilized in the semiconductor industry to produce crucibles and quartz glass products such as windows, rods, and tubes. The increasing use of semiconductors is predicted to underpin steady growth of HPQ use out to at least 2030.

2. Increase in number of photovoltaic (solar panel) installations

Rapid growth in the solar power industry is projected to fuel the market for high purity quartz for at least the remainder of this decade¹. In fact, Exawatt and ANZAPLAN, 2021, forecast that this segment will more than double in this period, overtaking the semiconductor industry as the main user of HPQ. It is the growth in this market segment that Greentech plans to target in particular.

3. Expansion of telecommunication and optical fibre industries

HPQ use in optical fibre manufacture is limited, but it uses the highest purity and receives the highest priced product.

HPQ pricing tends to be highest in semiconductor-related applications, meaning that although shipment volumes are relatively small in comparison with those from solar PV, overall revenues are comparatively high.

5.6 Market Supply and Feedstock Prices

According to the Stratum Resources and Exawatt and ANZAPLAN, 2021 reports, the current global market for refined HPQ is between about 90,000 and 120,000 tonnes per annum, with a total value of between US\$400M to \$800M. In particular, Exawatt and ANZAPLAN estimate that the value of the solar PV market (mainly in crucible production) will more than double by 2030, with total revenues by then of almost US\$300M. It is in this growth in a part of the market which is not significantly served by Sibelco and QuartzCo that Greentech sees its opportunity to be a supplier of choice with a premium feedstock.

The Company has found it very difficult to ascertain reliable price information for HPQ feedstock, largely because Sibelco, QuartzCo and Pacific Quartz do not supply ROM or partly processed feedstock to other processors. However, knowledge gained from Greentech's involvement in China over the past 5 years as well as the market research reports indicate that run-of-mine lump ore suppliers are receiving between approximately US\$400 and US\$700 per tonne for equivalent HPQ feedstock. In addition, some small suppliers producing crushed, acid-washed and sorted quartz are apparently receiving up to US\$1,200 per tonne.

Greentech's run-of-mine lump product is of high purity (IGR Section 3; Biggs (2022)) and we expect that it is likely to be priced near the top of the ROM lump range with minimal processing. In addition, the Company has commissioned the test work outlined elsewhere in this Prospectus ([Section 4](#)) and will continue to explore low-cost but effective processing options to command even higher prices.

6. RISK FACTORS

6.1 Introduction

The New Shares are considered highly speculative. An investment in the Company is not risk free. The proposed future activities of the Company are subject to a number of risks and other factors which may impact its future performance. Some of these risks can be mitigated by the use of safeguards and appropriate controls. However, many of the risks are outside the control of the Directors and management of the Company and cannot be mitigated.

The risks described in this Section 6 is not an exhaustive list of the risks faced by the Company or by investors in the Company. It should be considered in conjunction with other information in this Prospectus. The risk described in, and others not specifically referred to, in this Section 6 may in the future materially affect the financial performance and position of the Company and the value of the Shares offered under this Prospectus. The Shares to be issued pursuant to this Prospectus carry no guarantee with respect to the payment of dividends, return of capital or the market value of those securities. The risk described in this Section 6 also necessarily include forward looking statements. Actual events may be materially different to those described and may therefore affect the Company in a different way.

Investors should be aware that the performance of the Company may be affected by these risks, and the value of its Shares may rise or fall over any given period. None of the Directors or any person associated with the Company guarantee the Company's performance, the performance of the Shares the subject of the Offer or the market price at which the Shares will trade. The Directors strongly recommend that potential investors consider the risks detailed in this Section 6, together with information contained elsewhere in this Prospectus, and consult their professional advisers, before they decide whether or not to apply for Shares.

6.2 General Risks

A summary of the major general risks is described below.

(i) Share Market Risk

Applicants should be aware that there are risks associated with any securities investment.

Prior to the Offer, there was no public market for the Shares. There is no guarantee that an active trading market in the Shares will develop or that the price of the Shares will increase. The price, at which the Shares trade, may be above or below the Offer price and may fluctuate in response to a number of factors.

Further, the stock market is prone to price and volume fluctuations. There can be no guarantee that trading prices will be sustained. These factors may materially affect the market price of the Shares, regardless of Company's operational performance.

Share market conditions may affect the value of the Company's quoted securities regardless of the Company's operating performance. The market price of the Shares may be subject to fluctuation and may be affected by many factors including, but not limited to, the following:

- general economic outlook;
- interest rates and inflation rates;
- currency fluctuations;
- commodity price fluctuations;
- changes in investor sentiment toward particular market sectors;
- the demand for, and supply of, capital; or
- terrorism or other hostilities.

There is also no guarantee that an active market in the Shares will develop or that the price of the Shares will increase. There may be relatively few buyers or sellers of Securities on the ASX at any particular time.

(ii) General Economic Conditions

Changes in the general economic climate in which the Company operates may adversely affect the financial performance of the Company. Factors that may contribute to that general economic climate include the level of direct and indirect competition against the Company, include, but not are but not limited to:

- general economic conditions;
- changes in Government policies, taxation and other laws;
- the strength of the equity and share markets in Australia and throughout the world;
- movement in, or outlook on, exchange rates, interest rates and inflation rates;
- industrial disputes in Australia and overseas;
- changes in investor sentiment toward particular market sectors;
- financial failure or default by an entity with which the Company may become involved in a contractual relationship; and
- natural disasters, social upheaval or war.

Furthermore, changes in the general economic outlook in Australia and globally may impact the performance of the Company and its projects. Such changes may include:

- uncertainty in the Australian economy or increases in the rate of inflation resulting from domestic or international conditions (including movements in domestic interest rates and reduced economic activity);
- increases in expenses (including the cost of goods and services used by the Company);
- new or increased government taxes, duties or changes in taxation laws; and
- fluctuations in equity markets in Australia and internationally.

A prolonged and significant downturn in general economic conditions may have a material adverse impact on the Company's trading and financial performance.

(iii) Legislative Change

Changes in Australian and foreign government regulation and policies may adversely affect the financial performance or the current and proposed operations generally of the Company.

(iv) Unforeseen Expenses

While the Company is not aware of any expenses that may need to be incurred that have not been taken into account, if such expenses are subsequently incurred, the expenditure proposal of the Company may be adversely affected.

(v) Taxation

The Company is presently subject to the tax regimes of Australia which may be altered from time to time.

(vi) Dilution

In certain circumstances, the Directors may issue equity securities without any vote or action by Shareholders. If the Company were to issue any equity securities the percentage ownership of Shareholders may be reduced and diluted.

(vii) Legal Proceedings

Legal proceedings may arise from time to time in the course of the business of the Company. Legal proceedings brought by third parties including but not limited to customers, business partners or employees could negatively impact the business in the case where the impact of such litigation is greater than or outside the scope of the Company's insurance. As at the date of this Prospectus, there are no material legal proceedings affecting the Company and the Directors are not aware of any legal proceedings pending or threatened against or affecting the Company.

(viii) Accounting Standards

Changes to any applicable accounting standards or to any assumptions, estimates or judgments applied by management in connection with complex accounting matters may adversely impact the Company's financial statements, results or condition.

6.3 Risk Specific to investing in the Company

In addition to the general market and economic risks noted above, investors should be aware of the risks specific to an investment in the Company. The major risks are described below.

(i) Government Policy

The availability and rights of the Company to provide its goods and services immediately post Listing in Australia and initially China, as well as industry profitability generally, can be affected by changes in government policy that are beyond the control of the Company.

The Company's proposed business may require regulatory approval for the provision of its services. There is a risk that such approval may not be given, and even if given the Government may withdraw that approval. Changes to criteria applying to such approvals can impact on the ability of the Company to exploit its services or products on a cost-effective basis or at all.

(ii) Sovereign Risk

Although the Company has no operations in China it may be making sales to HPQ ore buyers in China thereby introducing an element of both sovereign and economic risks in investing in New Shares. Sovereign risks include, without limitation, changes to Chinese local law and economic conditions, changes to taxation rates and concessions and changes in the ability to enforce legal and contractual rights. Any of these factors may in the future adversely affect the Company's interests in these countries and the market price of the New Shares.

(iii) Contract risk

All contracts, including those entered into by the Company, carry a risk that the respective parties will not adequately or fully comply with their respective contractual rights and obligations, or that these contractual relationships may be terminated. In certain instances, it may be costly for the Company to enforce its contractual rights.

(iv) Operational Risk

The current and future operations of the Company, may be affected by a range of factors, including:

- (a) demands for the Company's Products;
- (b) changes to or cancellation of material agreements to which it or another Group member is a party;
- (c) competitors;
- (d) legislation and government policies;
- (e) exchange rates impacting on overseas manufacturers and sales;
- (f) taxation laws here and overseas where the Company operates its business;
- (g) unanticipated operational difficulties encountered;
- (h) problems incurred in maintaining or enforcing the Company's intellectual property in respect of the Company's trademarks and related branding;
- (i) unexpected shortages or increases in the costs of labour;
- (j) inability to obtain necessary regulatory consents or approvals in respect of the Company's services;
- (k) issues relating to mine production including access to the mining area, poor assay results and or native title claims;
- (l) markets for the Company's Products;
- (m) downgrading of the Company's assets; or
- (n) the renewal of any of the Company's exploration licences or leases.

(v) Sustainability to Growth and Margins

The sustainability of growth and the level of profit margins from operations are dependent on a number of factors outside the Company's control including global interest rates, global economic development growth rates and competition from other jurisdictions attracting new business.

(vi) Financing

The Company's ability to effectively implement its business strategy over time including acquisitions may depend in part on its ability to raise additional funds. There can be no assurance that any such equity or debt funding will be available to the Company on favourable terms or at all. If adequate funds are not available, the Company may not be able to take advantage of opportunities or otherwise respond to competitive pressures.

(vii) Exchange Rate Risk

The Company's contracts may be in currencies other than Australian dollars, which and therefore revenues, earnings, assets and liabilities of the Company may be exposed adversely to exchange rate fluctuation. The Company will adopt hedging policies to minimise such risks.

(viii) Industrial Risk

Industrial disruptions, work stoppages and accidents in the course of the Company's operations could result in losses and delays, which may adversely affect the provision of the Company's services and products post Completion which may impact on profitability.

(ix) Insurance Arrangements

The Company intends to ensure that insurance is maintained within ranges of coverage that the Company believes to be consistent with industry practice and having regard to the nature of activities conducted. No assurance however, can be given that the Company will be able to obtain such insurance coverage at reasonable rates or that any coverage it arranges will be adequate and available to cover any such claims.

(x) Management Actions

Directors will, to the best of their knowledge, experience and ability (in conjunction with their management) endeavour to anticipate, identify and manage the risks inherent in the activities of the Company, but without assuming any personal liability for the same, with the aim of eliminating, avoiding and mitigating the impact of risks on the performance of the Company.

(xi) Competition Risk

The Company operates in a competitive market and there is the risk that the Company will not be able to continue to compete profitably in such a market. The potential exists for the nature and extent of the competition to change rapidly, which may cause loss to the Company. The Company faces competition from competitors already established in the Australian market and the threat of future competition from new and emerging companies in all aspects of its business.

(xii) Ability to affect the Company's direction

Due to the number of Shares on issue in the Company, new investors who subscribe under the Prospectus will hold a relatively small portion of ownership of the Company. New investors should be aware that they are unlikely to be able to significantly affect the Company's direction by exercising their voting rights in the usual manner.

(xiii) Liquidity risk

As noted in [Section 2.7](#), a proportion of the on issue as at Listing (whether the Minimum or Maximum Subscription is achieved), will be the subject of Restriction Agreements, will not be available for sale for a period of 24 months from Official Quotation which may impact on the liquidity of the New Shares during this period.

(xiv) Change in Commodity Price

The Company's possible future revenues will probably be derived mainly from the sale of minerals and/or royalties gained from potential joint ventures or from mineral projects sold. Consequently, the Company's potential future earnings could be closely related to the price of these commodities.

Mineral prices fluctuate and are affected by numerous industry factors including demand for minerals, forward selling by producers, production cost levels in major producing regions and macroeconomic factors, eg inflation, interest rates, currency exchange rates and global and regional demand for, and supply of, minerals. If the market price for minerals sold by the Company were to fall below the costs of production and remain at such a level for any sustained period, the Company would experience losses and could have to curtail or suspend some or all of its proposed mining activities. In such circumstances, the Company would also have to assess the economic impact of any sustained lower commodity prices on recoverability.

(xv) Exploration and Evaluation Risk

Potential investors should understand that mineral exploration and development are high-risk undertakings. While the Company has attempted to reduce the risk by selecting projects that have identified advanced mineral targets, there is no guarantee of success. Even if an apparently viable deposit is identified, there is no guarantee that it can be economically exploited.

(xvi) Native Title Risk

As the Company either owns, or has rights to explore, mining tenements it is exposed to potential native title claims which can impact on the manner on the way the Company may operate a Tenement which could impact on profitability. To mitigate this risk, Native Title Agreements have been negotiated, agreed and signed.

(xvii) Plant Operational Risk

- (a) Processing costs may exceed projections and effect profits;
- (b) Mineral Resource is not at the proven stage and could prove to be substantially less than the current JORC estimates;
- (c) The Company may fail to gain sufficient market share in international markets.

6.4 Summary

Any combination of the above factors may materially affect the operations or financial performance of the Company and value of its securities. To that extent the New Shares offered in this Prospectus are subject to significant risk and uncertainty with respect to return or preservation of capital, the price (if any) at which the Shares may trade and the payment of dividends at any future time.

The above list of risk factors ought not to be taken as an exhaustive list of the risks faced by the Company or by investors in the Company. The above factors, and others not specifically referred to above, may in the future materially affect the financial performance of the Company and the value of the New Shares offered under this Prospectus. Potential investors should consider that the investment in the Company is speculative and should consult their professional advisers before deciding whether to invest in the Company.

7. BOARD AND MANAGEMENT PROFILES

7.1 Directors

Dr Michael Etheridge – BSc (Geology), FAIG, FAICD

Chairman and Non-Executive Director

Dr Etheridge is an award winning Geoscientist with over 50 years' experience in academic research, government research and in the minerals industry.

An experienced Non-Executive Director and Chair in private, public and listed commercial sectors, and in government research sector. Board experience in large, mid-tier (ConsMin) and small companies, including start-ups (Ariana & Geoinformatics). Achieved excellent returns for shareholders in ConsMin, Ballarat Goldfields and Lihir Gold via takeover / merger. For technical direction & leadership; director of EHW Pty Ltd (1994-97) and its successor SRK Consulting.

Chairman of SRK Australasia, he participated in setting strategic direction for growth of award-winning consulting business (to 30 staff in 3 countries, in 6 years). During post-merger integration and rapid diversification; responsible for "exporting" EHW's specific services to SRK and its clients worldwide. Director, SRK Australia, 1998-2002. 1998 – AICD Company Directors' Course; elected FAICD in March 1999.

Campbell Jones – BE

Non-Executive Director

A seasoned executive with over 30 years' experience at the CEO level with international experience including seven years in North America with companies generating multi-billion dollar revenues. Campbell's extensive experience enables support around key strategic elements including governance, risk management, executive mentorship, operational and commercial excellence, strategic planning, innovation and product development, together with a financial focus aligned to the committed strategic intent. Having worked at the CEO/COO level for a variety of ownership models including a large privately held multi-national company, a publicly listed USA company and an USA private equity company, provides Campbell with a strong understanding of the differing strategic objectives of each model and the initiatives and leadership needed to deliver the key outcomes.

Campbell has worked in the industrial minerals sector for over 25 years with multi-mine/plant operations in multiple countries. His mining experience extends across all mining operations and complex processing plants. Industrial minerals requires unique products for the various markets served requiring a strong product knowledge base together with application know-how and a robust brand pricing strategy. Extensive knowledge on supply chain and network optimisation, combining with a strong understanding of the importance of getting product to market on the international stage, all add to his skill set. Campbell has had direct experience in many minerals including silica sand, mineral sands, high purity quartz, limestone, magnesia, talc, feldspar, clays, bentonite, and barytes. These operations were market leaders across sectors including glass, ceramics, energy, electronics and foundry.

Campbell served on the Queensland Resource Council for over 5 years.

Stephen Ross – BSc (Geology), Grad Dip Fin, FFINSIA, MAusIMM, MAICD

Non-Executive Director

Stephen Ross is a geologist, independent consultant and public company director that has been involved in the international minerals industry in technical, business development and corporate positions for 30 years. Stephen has sourced significant investments for junior explorers and pre-development resource companies worldwide while holding managing director and technical positions when based in Central Asia, West Africa and Sri Lanka. He is a member of the Australasian Institute of Mining and Metallurgy, is a Fellow of the Financial Services Institute of Australasia and is a member of the Australian Institute of Company Directors. Stephen is currently the chairman of ASX-listed Power Minerals Limited, and a non-executive director of Pinnacle Minerals Limited and Summit Minerals Limited.

Hugh Dai – BEc, MA Int'l Studies

Executive Director

Hugh Dai began his career in resource investment with an investment bank in China in 1986. He has been involved in mining, resources, investment and marketing businesses for over 30 years and has extensive experience in trading and investment in international markets.

Hugh was Managing Director/CEO of International Coal Ltd (ICX), an ASX listed company, from 2011 to 2015 and was instrumental in raising seed capital to IPO the company on ASX. Subsequent to its listing the company was successful in confirming mineral resources over a billion tonnes.

From 2016 Hugh has been involved in the HPQ business and has since managed the mining and marketing of HPQ ore and the purification process of HPQ end products. As a result of his involvement in the feasibility, establishment and operation of a 1000t per annum HPQ plant in China.

Hugh diverse range of experience across regulatory bodies, financial institutions and relevant government agencies in both Australia and China provides a key link between mining a resource and marketing its products. He is currently a director on several proprietary company boards, and is a member of the Australian Institute of Company Directors. Hugh is a graduate of University of Hunan, China, with Economics Degree and Master of Arts in International Studies at Griffith University, Australia.

Michael Ivkovic – B Comm

Non-Executive Director

Mr Ivkovic has extensive experience in the structured finance, funds management and investment banking industry in Australia and Asia. Michael was formerly the Chairman of Brick Securities Limited and Executive Chairman of NZI Securities Limited and NZI Investment Services Limited.

Michael established The Australian Private Capital Advisory Services Group in 1988 and retired from that position in 1998 following a management buyout. Since that time Michael has served as a director of Paramount Securities Limited and the publicly listed Harrington Limited, AFT Limited, Meridien Resources Limited (Stonewall Resources Limited) and Capital Mining Limited.

Michael is currently a director of Golden Globe Resources Limited, Bakup Power Solutions Ltd and Hightower Finance Pty Ltd

Michael holds a Bachelor of Commerce degree from the University of New South Wales.

7.2 Chief Executive Officer

Peter Crooks – BSc (Mining Engineering), MAusIMM

With over thirty-five years of experience in the mining industry, Peter Crooks is a specialist in Mining Operations, Projects, and Executive Management. Specific expertise is driving performance improvement through business redesign, rationalisation, and optimisation of operations and construction projects, either underground or surface. Peter has worked on four major projects, including the Oyce Tolgoi Copper Project in Mongolia, one of the largest undeveloped underground deposits in the world. Having worked in Australia, Canada, Mongolia, Ghana, and China, and having been involved with both client and contractor at pre-feasibility, feasibility, construction, operations, and Executive level, Peter is intimately familiar with the requirements to ensure the success of mining companies.

Peter was the first Rio Tinto employee to work on site at Oyce Tolgoi in Mongolia through 2008 to 2010. Effectively as the operational MD through 2012/ 13, Peter led Crocodile Gold NT Operations to commercial production and profitability through significant business reengineering and cost reduction. In 2014 Peter was contracted by Western Desert Resources to drive Roper Bar Iron Ore project from construction to nameplate capacity of 3.0 Mtpa. Following the appointment as GM and in-country lead of a foreign-owned underground mining company in China through 2015, Peter was COO of Centennial Mining, who owned and operated gold mines in Victoria, through to its sale in 2021.

7.3 Company Secretary

Terry Grace – B Bus, FCPA

Terry has had a long term commitment to Accounting, Tax and Management for SME entities, having commenced Public Practice in 1984 as Terry Grace and Associates. This business started in Western Australia.

Terry has held Directorships in numerous companies, Private and unlisted Public, and across a variety of businesses including Gold exploration. Terry was the Managing Director of Mini Golf Australia Pty Ltd, CEO for the multi-million Dollar redevelopment of the Mangrove Hotel in Broome and Director of Lalla Rookh Pty Ltd. He has advised many clients over the past 40 years of his career, with extensive experience in management of corporate organisations.

Terry holds a Bachelor of Business degree (Accounting) from Curtin University. He has been a Fellow of CPA since 1990 and is a past Chair of the Public Practice Committee for CPA NSW.

7.4 Offer Key Personnel

Adam McKenzie – BSc (Geology), MAIG

Geological Consultant

Mr Adam Mackenzie is a Geologist with 20 years' experience in exploration, resource development and mining operations within Australia and overseas. Adam's operations expertise comes from his diverse mining background in the surface and underground mining of poly-metals, coal and quarry commodities. Adam provides his services to the Company via Boya Resources Pty Ltd.

During this time, Adam has been responsible for resource identification, feasibility studies, planning and execution of large mining projects with multi-disciplinary teams, in a variety of management and consulting roles with companies such as BHP, Anglo and Holcim.

Adam is the Managing Director of Boya Resources, who provides technical advice and operation services to the mining and extractive industries. Mr Mackenzie has an Honours degree in Science from Curtin University WA, he also has a graduate degree in project management from Central Queensland University.

8. CORPORATE GOVERNANCE

8.1 Council Principles and Recommendations

The Company has adopted comprehensive systems of control and accountability as the basis for the administration of corporate governance. The Board is committed to administering the Company's policies and procedures with openness and integrity, pursuing the true spirit of corporate governance commensurate with the Company's needs.

To the extent applicable, the Company has adopted the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations (Recommendations).

In light of the Company's size and nature, the Board considers that the current Board composition and structure is a cost effective and practical method of directing and managing the Company. As the Company's activities develop in size, nature and scope, the size of the Board and the implementation of additional corporate governance policies and structures will be reviewed.

The Company's main corporate governance policies and practices as at the date of this Prospectus are detailed below. The Company's full Corporate Governance charter is available in a dedicated corporate governance information section of the Company's website at www.greentechminerals.com.au.

8.2 Board of Directors

The Board is responsible for the corporate governance of the Company. The Board develops strategies for the Company, reviews strategic objectives and monitors performance against those objectives. The Company recognises that effective corporate governance is a critical element contributing to the longer-term success of the Company. The Board and all levels of management are fully committed to maintaining and enhancing its corporate governance.

The objectives of the corporate governance processes are to:

- (i) maintain and increase Shareholder value;
- (ii) ensure an ethical and prudent basis for the Company's conduct and activities; and
- (iii) ensure compliance with the Company's legal and regulatory objectives.

8.3 Duties of Directors

Directors are expected to accept all duties and responsibilities associated with the running of a public company, to act in the best interests of the Company and to carry out their duties and responsibilities with due care and diligence.

Directors are required to take into consideration conflicts when accepting appointments to other Boards. Accordingly, Directors wishing to accept appointment to other Boards must first seek approval from the Board, approval of which will not be unreasonably withheld.

Consistent with the above, the Board has established a division of responsibilities between the Board and management to assist in managing expectations and avoiding misunderstandings about their respective roles and accountabilities.

In general, the Board assumes (amongst others) the following responsibilities:

- (i) providing leadership and setting the strategic objectives of the Company;
- (ii) appointing and when necessary, replacing the Executive Directors and the Chief Executive Officer;
- (iii) approving the appointment and when necessary, replacement of other senior executives;
- (iv) undertaking appropriate checks before appointing a person, or putting forward to security holders a candidate for election, as a Director;

- (v) overseeing management's implementation of the Company's strategic objectives and its performance generally;
- (vi) approving operating budgets and major capital expenditure;
- (vii) overseeing the integrity of the Company's accounting and corporate reporting systems including the external audit;
- (viii) overseeing the company's process for making timely and balanced disclosure of all material information concerning the Company that a reasonable person would expect to have a material effect on the price or value of the Company's securities;
- (ix) ensuring that the Company has in place an appropriate risk management framework and setting the risk appetite within which the Board expects management to operate; and
- (x) monitoring the effectiveness of the Company's governance practices.

The Company is committed to ensuring that appropriate checks are undertaken before the appointment of a Director and has in place written agreements with each Director which detail the terms of their appointment.

8.4 Composition of the Board

The Board currently comprises of five (5) Directors. The names, qualifications and relevant experience of each Director is set out in [Section 7](#) of this Prospectus. There is no requirement for the Directors to hold shares in the Company.

Board policy is that the Board will constantly review and monitor its performance. As the Company's activities increase in size, nature and scope, the size of the Board will be reviewed periodically and the Board may seek to appoint persons who, in the opinion of the Board, will provide specialist expertise required for the Board to adequately perform its role.

8.5 Board Membership

Members of the Board have been brought together to provide a blend of qualifications, skills and national and international experience required for managing a Company operating within the mining and minerals processing industry.

8.6 Appointment and Retirement of Directors

The Constitution provides that Directors are subject to retirement by rotation, by order of length of appointment. Retiring Directors are eligible for re-election by Shareholders at the annual general meeting of the Company.

8.7 Independent Professional Advice

The Board has determined that individual Directors may, in appropriate circumstances, engage outside advisers at the Company's expense. The engagement of an outside adviser is subject to the prior approval of the Board, which will not be unreasonably withheld.

8.8 Remuneration, Nomination and Diversity Policy

The maximum aggregate amount payable to Non-Executive Directors as Directors' fees has been set at \$225,000 per annum exclusive of any GST. The Constitution provides that Director's fees can only be increased by resolution at a general meeting of its Shareholders.

The remuneration of any Executive Director will be decided by the Board following the recommendation of the Remuneration Committee, without the affected Executive Director participating in that decision-making process. The Nomination Committee is responsible for identifying and evaluating suitable candidates for appointment to the Board, making

recommendations to the Board in relation to the appointment and removal of Directors and regularly reviewing the composition of the Board.

The Board will be responsible for reviewing and negotiating the compensation arrangements of senior executives and consultants.

8.9 Audit and Risk Policy

The Company has decided the Audit and Risk Committee consisting of Messrs Etheridge, Ross and Grace will be responsible for maintaining and reviewing the Company's audit and risk practices. The Audit and Risk Committee's responsibilities include, but are not limited to, monitoring and reviewing any matters of significance affecting financial reporting and compliance, the integrity of the financial reporting of the Company, the Company's internal financial control system and the Company's risk management systems, the identification and management of business, economic, environmental and social sustainability risk.

8.10 Internal Management Controls

Control over the day-to-day operations of the Company will be exercised by the Chief Executive Officer.

The Board also monitors the performance of outside consultants engaged from time to time to complete specific projects and tasks in the manner described in their respective engagements.

8.11 Identifying Significant Business Risks

The Board regularly monitors operational and financial performance of the Company's activities. It monitors and receives advice on areas of operation and financial risk and considers strategies for appropriate risk management. All operational and financial strategies adopted are aimed at improving the value of the Company's Shares.

8.12 ASX Corporate Governance

To further enhance listed entities' disclosure of corporate governance issues, the ASX Corporate Governance Council (CGC) was established for the purpose of setting an agreed set of corporate governance standards of best practice of Australian listed entities. The CGC has released its Principles of Good Corporate Governance and Best Practice Recommendations (ASX Guidelines) which will apply to the Company's financial statements upon listing on the ASX. The ASX Guidelines articulate eight (8) core principles that CGC believes underlie good corporate governance.

The information below outlines the main corporate governance policies of the Company which the Board has adopted as well as addressing in some detail the ASX Guidelines.

Before referring to the specific principles set out in the ASX Guidelines and the steps being taken by the Company to comply with those, the following factors should be noted:

- Each of the Directors dedicates considerable time and effort to the affairs of the Company. The Directors manage to do so within busy schedules for other work and business commitments and as a consequence, the principal focus of their endeavours (while operating within a sound base for corporate governance) must necessarily be promotion of the Company's activities and improving Shareholder value; and
- The Company is committed to adopting corporate governance policies commensurate with its business activities and as mentioned earlier has adopted a formal Corporate Governance Charter, setting out the roles and responsibilities of the independent committees described above.

It is within the above context that the Directors are establishing the appropriate processes to ensure that they are compliant with the ASX Guidelines on being admitted to the Official List, should that

occur. In the context those Guidelines, the Directors make the following observations in relation to the Company's corporate governance status.

The Company's corporate governance policies are structured with reference to the ASX Corporate Governance Council's Corporate Governance Principles and Recommendations (4th edition) with 2020 Amendments (ASX Corporate Governance Principles).

The principles recommended by the ASX Corporate Governance Council are:

ASX CG Principles	Compliance by the Company
<p>Principle 1 – Lay solid foundations for management and oversight</p> <p>A listed entity should establish and disclose the respective roles and responsibilities of board and management and how their performance is monitored and evaluated.</p>	
<p>Recommendation 1.1</p> <p>A listed entity should disclose the respective roles and responsibilities of its board and management, and those matters expressly reserved to the board and those delegated to management.</p>	<p>The Company has adopted a formal charter (Board Charter) clearly setting out the respective roles and responsibilities of the Board and management. The key responsibilities of the Board include:</p> <ul style="list-style-type: none"> • setting the long-term strategy and annual business plan including objectives and milestones to be achieved; • monitoring the performance of the Company against the financial objectives and operational goals set by the Board and reviewing the implementation of Board approved strategies; • assessing the appropriateness of the skill sets and the levels of experience of the members of the Board, individually and as a whole and selecting new members to join the Board when a vacancy exists; • appointing, removing and determining the terms of engagement of the Directors, Chief Executive Officer and Company Secretary; • overseeing the delegation of authority for the day-to-day management of the Company; • ensuring that the risk management systems, financial reporting and information systems, personnel, policies and procedures are all operating efficiently and effectively by establishing a framework of internal controls and compliance; • reviewing major contracts, goods or services on credit terms, acceptance of counter-party risks and issuing guarantees on behalf of the Company; • approving the capital structure and major funding requirements of the Company; • establishing a Disclosure and Communication Policy to ensure that the Company complies with its disclosure obligations under the ASX listing rules; • approving the Company's half year and full year reports to the shareholders, ASX and ASIC; and • ensuring that recruitment, retention, termination, remuneration, performance review and succession planning policies and procedures are in place and complied with.

ASX CG Principles	Compliance by the Company
<p>Recommendation 1.2</p> <p>A listed entity should:</p> <ul style="list-style-type: none"> • undertake appropriate checks before appointing a person, or putting forward to security holders a candidate for election as a director; and • provide security holders with all material information in its possession relevant to a decision on whether or not to elect or re-elect a director. 	<p>The Board currently undertakes appropriate checks before appointing or nominating board candidates.</p> <p>The Company has established a Nomination and Remuneration Committee to identify and make recommendations to the Board for the appointment of new Board candidates, having regard to their skills, experience and expertise.</p> <p>In doing so, the Board requires this committee to undertake appropriate checks on potential Board candidates.</p>
<p>Recommendation 1.3</p> <p>A listed entity should have a written agreement with each director and senior executive setting out the terms of their appointment.</p>	<p>All directors and senior executives have entered into written appointment agreements with the Company. Specifically:</p> <ul style="list-style-type: none"> • the four (4) non-executive Directors have each executed Non-Executive Service Agreements setting out the terms and conditions of their appointment; and • the one (1) Executive Director has entered into employment agreement, setting out the terms and conditions of his employment.
<p>Recommendation 1.4</p> <p>The Company secretary of a listed entity should be accountable directly to the board, through the chair, on all matters to do with the proper functioning of the board.</p>	<p>The Company Secretary is accountable directly to the Board, through the chairperson, on all matters to do with the proper functioning of the Board.</p> <p>The Company has adopted a formal board charter (Board Charter) setting out the Company Secretary's responsibilities.</p> <p>Under the Board Charter, the Company Secretary is responsible for:</p> <ul style="list-style-type: none"> • advising the Board and its committees on governance matters; • monitoring the Board and committee policy and procedures are followed; • coordinating the timely completion and dispatch of Board and committee papers; • ensuring the business at Board and committee meetings is accurately captured in the minutes; and helping to organise and facilitate the induction and professional development of Directors and the Company Secretary.

ASX CG Principles	Compliance by the Company
<p>Recommendation 1.5</p> <p>A listed entity should:</p> <ul style="list-style-type: none"> • have a diversity policy which includes requirements for the board or a relevant committee of the board for achieving gender diversity and to assess annually both the objectives and the entity's progress in achieving them; • disclose that policy or a summary of it; and • disclose as at the end of each reporting period the measurable objectives for achieving gender diversity set by the board or a relevant committee of the board in accordance with the entity's diversity policy and its progress towards achieving them, and either: <ul style="list-style-type: none"> (i) the respective proportions of men and women on the board, in senior executive positions and across the whole organisation (including how the entity has defined "senior executive" for these purposes); or (ii) if the entity is a "relevant employer" under the Workplace Gender Equality Act, the entity's most recent "Gender Equality Indicators", as defined in and published under that Act. 	<p>The Company has a diversity policy in place (Diversity Policy).</p> <p>The Diversity Policy entrusts the Board with the responsibility for designing and overseeing the Diversity Policy.</p> <p>Under the Diversity Policy, the Board is:</p> <ul style="list-style-type: none"> • required to develop initiatives that will promote and achieve diversity goals; responsible for reviewing this diversity policy and will assess the status of diversity within the Company and the effectiveness of this policy in achieving the measurable objectives which have been set to achieve diversity; and • responsible for assessing the effectiveness of the Company's diversity objectives each year.
<p>Recommendation 1.6</p> <p>A listed entity should:</p> <ul style="list-style-type: none"> • have and disclose a process for periodically evaluating the performance of the board, its committees and individual directors; and • disclose, in relation to each reporting period, whether a performance evaluation was undertaken in the reporting period in accordance with that process. 	<p>Under the Board Charter, each Director's performance is assessed when standing for re-election. Before each annual general meeting, the Chairperson of the Board assesses the performance of any Director standing for re-election and the Board will determine their recommendation to shareholders on the re-election of the Director (in the absence of the Director involved). The Board (excluding the Chairperson), will conduct the review of the Chairperson.</p>
<p>Recommendation 1.7</p> <p>A listed entity should:</p> <ul style="list-style-type: none"> • have and disclose a process for periodically evaluating the performance of its senior executives; and • disclose, in relation to each reporting period, whether a performance evaluation was undertaken in the reporting period in accordance with that process. 	<p>Under the Board Charter, senior executives' performance will be considered by the independent Directors in a meeting separate to the Board meetings. The Chairperson is responsible for ensuring independent Director meetings take place on a regular basis.</p>

Principle 2 – Structure the board to add value

A listed entity should have a board of an appropriate size, composition, skills and commitment to enable it to discharge its duties effectively.

Recommendation 2.1

The board of a listed entity should have a nomination committee which:

- (i) has at least three members, a majority of whom are independent directors; and
- (ii) the members of the committee; and
- (iii) as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or
- (iv) if it does not have a nomination committee, disclose that fact and the processes it employs to address board succession issues and to ensure that the board has the appropriate balance of skills, knowledge, experience, independence and diversity to enable it to discharge its duties and responsibilities effectively.

The Board has adopted a dedicated Nomination and Remuneration Committee, which will have authority and power to exercise the roles and responsibilities granted to it under a nomination and remuneration committee charter (Nomination and Remuneration Committee Charter), and any other resolutions of the Board from time to time. The committee will comprise of:

Dr M Etheridge
Mr M Ivkovic
Mr S Ross

Recommendation 2.2

A listed entity should have and disclose a board skills matrix setting out the mix of skills and diversity that the board currently has or is looking to achieve in its membership.

The Board has not, at this time, adopted a board skills matrix. However, the Company will seek to have directors with an appropriate range of skills, experience and expertise and an understanding of and competence to deal with current and emerging issues of the business. In addition, the Company's succession plans are designed to maintain an appropriate balance of skills, experience and expertise on the Board.

Recommendation 2.3

A listed entity should disclose:

- the names of the directors considered by the board to be independent directors;
- if a director has an interest, position, association or relationship of the type described in Box 2.3 but the board is of the opinion that it does not compromise the independence of the director, the nature of the interest, position, association or relationship in question and an explanation of why the board is of that opinion; and the length of service of each Director.

Dr Michael Etheridge
Mr Stephen Ross
Mr Michael Ivkovic
Mr Campbell Jones

are all considered independent Directors.

The Board will regularly assess the independence of each Director in light of the interests disclosed by them. That assessment will be made at least annually at, or around the time, that the Board considers candidates for election to the Board, and each independent Director is required to provide the Board with all relevant information for this purpose.

If the Board determines that a Director's independent status has changed, that determination will be disclosed to the market in a timely fashion.

ASX CG Principles	Compliance by the Company
<p>Recommendation 2.4</p> <p>A majority of the board of a listed entity should be independent directors.</p>	<p>The Board currently consists of:</p> <p>Dr M Etheridge Mr C Jones Mr S Ross Mr M Ivkovic Mr H Dai</p> <p>Messrs Etheridge, Jones, Ross and Ivkovic are all independent Directors being the majority of the Board.</p>
<p>Recommendation 2.5</p> <p>The chair of the board of a listed entity should be an independent director and, in particular, should not be the same person as the CEO of the entity.</p>	<p>The Chairperson of the Board, who is a non-executive and independent director. Accordingly, the Company is in compliance with this recommendation at present.</p>
<p>Recommendation 2.6</p> <p>A listed entity should have a program for inducting new directors and provide appropriate professional development opportunities for directors to develop and maintain the skills and knowledge needed to perform their role as directors effectively.</p>	<p>Under the Board Charter, the Directors are expected to participate in any induction or orientation programs on appointment, and any continuing education or training arranged for them.</p> <p>The Company Secretary will help to organise and facilitate the induction and professional development of Directors.</p>

Principle 3 – Act ethically and responsibly

A listed entity should act ethically and responsibly.

<p>Recommendation 3.1</p> <p>A listed entity should:</p> <ul style="list-style-type: none"> • have a code of conduct for its directors, senior executives and employees; and • disclose that code or a summary of it. 	<p>The Board has adopted a code of conduct (Code of Conduct) which sets out the values, commitments, ethical standards and policies of the Company and outlines the standards of conduct expected of the Company's business and people, taking into account the Company's legal and other obligations to its stakeholders.</p> <p>The Code of Conduct will apply to all Directors, as well as all officers, employees, contractors, consultants, other persons that act on behalf of the Company, and associates of the Company.</p> <p>The Code of Conduct is available on the Company's website.</p>
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Principle 4 – Safeguard integrity in corporate reporting

A listed entity should have formal and rigorous processes that independently verify and safeguard the integrity of its corporate reporting.

Recommendation 4.1

The board of a listed entity should:

- have an audit committee which:
 - (i) has at least three members, all of whom are non-executive directors and a majority of whom are independent directors; and
 - (ii) is chaired by an independent director, who is not the chair of the board, and disclose:
 - (a) the charter of the committee;
 - (b) the relevant qualifications and experience of the members of the committee; and
 - (c) in relation to each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or
- if it does not have an audit committee, disclose that fact and the processes it employs that independently verify and safeguard the integrity of its corporate reporting, including the processes for the appointment and removal of the external auditor and the rotation of the audit engagement partner.

The Board is committed to following Recommendation 4.1 and has established an Audit and Risk Committee. This Committee is responsible for, amongst other things, appointing the Company's external auditors and overseeing the integrity of the Company's financial reporting systems and financial statements.

The committee will comprise of:

- (i) Dr M Etheridge
- (ii) Mr S Ross
- (iii) Mr C Jones (Chair)

The Audit and Risk Committee Charter is available on the Company's website.

Recommendation 4.2

The board of a listed entity should, before it approves the entity's financial statements for a financial period, receive from its CEO and CFO a declaration that, in their opinion, the financial records of the entity have been properly maintained and that the financial statements comply with the appropriate accounting standards and give a true and fair view of the financial position and performance of the entity and that the opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

The Board will implement a process to receive written assurances from its Managing Director that the declarations that will be provided under section 295A of the Corporations Act 2001 (Cth) are founded on a system of risk management and internal control and that the system is operating in all material respects in relation to financial reporting risks.

The Board will seek these assurances prior to approving the annual financial statements for all half year and full year results that follow.

Recommendation 4.3

A listed entity that has an AGM should ensure that its external auditor attends its AGM and is available to answer questions from security holders relevant to the audit.

The Company has adopted a formal Disclosure and Communication Policy, where there is an express requirement that the external auditor will attend the AGM and be available to answer questions about the conduct of the audit and the preparation and content of the auditor's report.

Principle 5 – Make timely and balanced disclosure

A listed entity should make timely and balanced disclosure of all matters concerning it that a reasonable person would expect to have a material effect on the price or value of its securities.

Recommendation 5.1

A listed entity should:

- have a written policy for complying with its continuous disclosure obligations under the Listing Rules; and
- disclose that policy or a summary of it.

Consistent with the Board's commitment to improving its disclosure policy, the Board has adopted a Disclosure and Communication Policy, which sets out the Company's commitment to the objective of promoting investor confidence and the rights of shareholders by:

- complying with the continuous disclosure obligations imposed by law;
- ensuring that Company announcements are presented in a factual, clear and balanced way;
- ensuring that all shareholders have equal and timely access to material information concerning the Company; and
- communicating effectively with shareholders and making it easy for them to participate in general meetings.

The Disclosure and Communication Policy is available on the Company's website.

Principle 6 – Respect the rights of security holders

A listed entity should respect the rights of its security holders by providing them with appropriate information and facilities to allow them to exercise those rights effectively.

Recommendation 6.1

A listed entity should provide information about itself and its governance to investors via its website.

The Company recognises the rights of its shareholders and other interested stakeholders to have easy access to balanced, understandable and timely information concerning the operations of the Group. The Chief Executive Officer and the Company Secretary will be primarily responsible for ensuring communications with shareholders are delivered in accordance with this strategy and with its current market disclosure policy.

The Company strives to communicate with shareholders and other stakeholders in a regular manner as outlined in Principle 5 of this statement.

Information concerning the Company and its governance practices will be made available on its website in due course.

ASX CG Principles	Compliance by the Company
<p>Recommendation 6.2</p> <p>A listed entity should design and implement an investor relations program to facilitate effective two-way communication with investors.</p>	<p>As mentioned above under Recommendation 5.1, the Board has adopted a Disclosure and Communication Policy which supports its commitment to effective communication with its shareholders. In addition, the Company intends to communicate with its shareholders:</p> <ul style="list-style-type: none"> • by making timely market announcements; • by posting relevant information on to its website; • by inviting shareholders to make direct inquiries to the Company; and • through the use of general meetings.
<p>Recommendation 6.3</p> <p>A listed entity should disclose the policies and processes it has in place to facilitate and encourage participation at meetings of security holders.</p>	<p>The Board encourages participation of shareholders at the Annual General Meeting or any other shareholder meetings to ensure a high level of accountability and identification with the Company's strategy and goals. Shareholders are requested to vote on the appointment and aggregate remuneration of Directors, the granting of options and shares to Directors, issue of shares and changes to the constitution.</p>
<p>Recommendation 6.4</p> <p>A listed entity should give security holders the option to receive communications from, and send communications to, the entity and its security registry electronically.</p>	<p>The Company's Shareholders may elect to receive information from the Company and its registry electronically. Otherwise, the Company and its registry will communicate by post with shareholders who have not elected to receive information electronically.</p>

Principle 7 – Recognise and manage risk

A listed entity should establish a sound risk management framework and periodically review the effectiveness of that framework.

Recommendation 7.1

The board of a listed entity should:

- have a committee or committees to oversee risk, each of which:
 - (i) has at least three members, a majority of whom are independent directors; and
 - (ii) is chaired by an independent director, and disclose:
 - (iii) the charter of the committee;
 - (iv) the members of the committee; and
 - (v) as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or
- if it does not have a risk committee or committees that satisfy (a) above, disclose that fact and the processes it employs for overseeing the entity's risk management framework.

The Board has adopted a formal Audit and Risk Committee to, amongst other things, ensure the Company has an effective risk management system in place and to manage key risk areas.

The committee will comprise of:

Dr M Etheridge

Mr S Ross

Mr C Jones

The Company intends to disclose, at the relevant time, the number of times the Committee met, and the attendance at those meetings, at the end of each reporting period.

The Company has adopted an Audit and Risk Committee Charter which is available on the Company's website.

Recommendation 7.2

The board or a committee of the board should:

- review the entity's risk management framework at least annually to satisfy itself that it continues to be sound; and
- disclose, in relation to each reporting period, whether such a review has taken place.

Under the Board Charter, the Board will ensure that the Company has in place an appropriate risk management framework and will set the appetite within which the Board expects management to operate.

Further, it is intended that the Audit and Risk Committee will, among other things, regularly review and update the risk profile and ensure that the Company has an effective risk management system.

As part of this process, the Board will review, at least annually, the Company's risk management framework in order to satisfy itself that it continues to be sound.

The Company intends to disclose, at the relevant time, whether a review the Company's risk management framework was undertaken during the relevant reporting period.

ASX CG Principles	Compliance by the Company
<p>Recommendation 7.3</p> <p>A listed entity should disclose:</p> <ul style="list-style-type: none"> • if it has an internal audit function, how the function is structured and what role it performs; or • if it does not have an internal audit function, that fact and the processes it employs for evaluating and continually improving the effectiveness of its risk management and internal control processes. 	<p>The Audit and Risk Committee is responsible for ensuring that the Company has appropriate internal audit systems and controls in place, and for overseeing the effectiveness of these internal controls. The Committee will also be responsible for conducting investigations of breaches or potential breaches of these internal controls.</p> <p>In addition, the Audit and Risk Committee will be responsible for preparing a risk profile which describes the material risks facing the Company, regularly reviewing and updating this risk profile, and assessing and ensuring that there are internal controls in place for determining and managing key risks.</p>

Principle 8 – Remunerate fairly and responsibly

A listed entity should pay director remuneration sufficient to attract and retain high quality directors and design its executive remuneration to attract, retain and motivate high quality senior executives to align their interests with the creation of value for security holders.

<p>Recommendation 8.1</p> <p>The board of a listed entity should:</p> <ul style="list-style-type: none"> • have a remuneration committee which: <ul style="list-style-type: none"> (i) has at least three members, a majority of whom are independent directors; and (ii) is chaired by an independent director, and disclose: <ul style="list-style-type: none"> (a) the charter of the committee; (b) the members of the committee; and (c) as at the end of each reporting period, the number of times the committee met throughout the period and the individual attendances of the members at those meetings; or • if it does not have a remuneration committee, disclose that fact and the processes it employs for setting the level and composition of remuneration for directors and senior executives and ensuring that such remuneration is appropriate and not excessive. 	<p>The Company has established a Nomination and Remuneration Committee. The Committee is responsible for developing, reviewing and making recommendations on:</p> <p>The committee will comprise of:</p> <p>Mr S Ross Mr M Ivkovic Dr M Etheridge</p> <p>each being independent Directors</p> <p>The Company intends to disclose, at the relevant time, the number of times the committee met, and the attendance at those meetings, at the end of each reporting period.</p> <p>The Company has adopted a Nomination and Remuneration Committee Charter which is on the Company's website.</p>
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ASX CG Principles	Compliance by the Company
<p>Recommendation 8.2</p> <p>A listed entity should separately disclose its policies and practices regarding the remuneration of non-executive directors and the remuneration of executive directors</p>	<p>The Company's remuneration policy is disclosed in the Directors' Report which forms part of the Annual Report. The policy has been set out to ensure that the performance of Directors, key executives and staff reflect each person's accountabilities, duties and their level of performance, and to ensure that remuneration is competitive in attracting, motivating and retaining staff of the highest quality. A program of regular performance appraisals and objective setting for key executives and staff is in place. These annual reviews take into account individual and Company performance, market movements and expert advice.</p>
<p>Recommendation 8.3</p> <p>A listed entity which has an equity-based remuneration scheme should:</p> <ul style="list-style-type: none"> • have a policy on whether participants are permitted to enter into transactions (whether through the use of derivatives or otherwise) which limit the economic risk of participating in the scheme; and • disclose that policy or a summary of it. 	<p>The Constitution permits Directors, senior executives and other officers of the Company to trade in Company shares as long as they comply with the Company's Share Trading Policy. The Share Trading Policy is a code that is designed to minimise the potential for insider trading.</p> <p>Directors must notify the Chairman of the Board, before they buy or sell shares in the Company. If the Chairman of the Board intends to trade in the Company shares, the Chairman of the Board must give prior notice to the whole Board. The details of the share trading must be given to the Company Secretary who must lodge such details of such changes in with the ASX.</p> <p>Senior executives must give prior notice to the Chief Executive Officer, while other officers must notify the Company Secretary, before trading in the Company shares and details of all such transactions must be given, in writing, to the Company Secretary within 7 business days.</p> <p>Any changes in substantial shareholding of the Directors, senior executives or other officers must be reported to the ASX within 2 business days of such trading. The policy also recommends that trading in the Company shares only occur in the following trading windows:</p> <ul style="list-style-type: none"> (i) 30 days after the announcement of the Company's half year results; and (ii) 30 days after the announcement of the Company's full year results.

Copies of the Company's Corporate Governance charters, codes and policies are available in full on the Company's website at www.greentechminerals.com.au.

You are also able to obtain, free of charge, a copy of each of the above corporate governance policies and procedures by contacting the Company at its registered office during normal business hours during the Offer Period. Following admission to the Official List of the ASX, the Company will report any departures from the ASX Corporate Governance Principles in its annual report.

9. HISTORICAL FINANCIAL INFORMATION

9.1 Introduction

The financial information contained in this Section 9 includes:

- (a) summary audited historical Statement of Financial Position as at 30 June 2022, 30 June 2021 and 30 June 2020, and audited historical statement of Profit or Loss and Statement of Cash Flows of the Company for the years then ended (Historical Financial Information); together with
- (b) the pro forma Statement of Financial Position of the Company as at 30 June 2022 and supporting notes which include the pro forma adjustments (Pro Forma Financial Information); (together referred to as the Financial Information).

The Directors are responsible for the preparation and inclusion of the Financial Information in the Prospectus. William Buck has prepared an Independent Limited Assurance Report in respect of the Financial Information, as set out in [Section 10](#). Investors should note the scope and limitations of the Independent Limited Assurance Report.

All amounts disclosed in this Section are presented in Australian dollars.

9.2 Basis of preparation of the Historical Financial Information

The Historical Financial Information included in this Section 9 has been prepared in accordance with the recognition and measurement principles of Australian Accounting Standards (including the Australian Accounting Interpretations) adopted by the Australian Accounting Standards Board and the Corporations Act. The Historical Financial Information is presented in an abbreviated form insofar as it does not include all the presentation, disclosures, statements or comparative information as required by Australian Accounting Standards applicable to annual financial reports prepared in accordance with the Corporations Act 2001. Significant accounting policies applied to the Historical Financial Information.

The Historical Financial Information of the Company relates to the period from 1 July 2019 to 30 June 2022. The Historical Financial Information has been prepared for the purpose of the Offer.

9.3 Basis of preparation of the Pro Forma Financial Information

The Pro Forma Financial Information included in this Section 9 has been prepared for the purposes of inclusion in this Prospectus. The Pro Forma Financial Information is based on the audited Statement of Financial Position of the Company as at 30 June 2022 and adjusting for the impacts of the Offer and other pro forma adjustments.

The Pro Forma Financial Information does not reflect the actual financial results of the Company for the period indicated. The directors of the Company believe that it provides useful information as it illustrates to investors the financial position of the Company immediately after the Offer is completed and related pro forma adjustments are made.

The information set out in this Section 9 and the Company's selected financial information should be read together with:

- (a) the Risk Factors described in [Section 6](#);
- (b) the Use of Funds described in [Section 2](#);
- (c) the Indicative Capital Structure described in [Section 2](#);
- (d) the Independent Limited Assurance Report on the Historical Financial Information set out in this Section 9; and
- (e) the other information contained in this Prospectus.

Investors should also note that historical results are not a guarantee of future performance.

9.4 Historical Statement of Profit or Loss

The table below presents the Historical Statement of Profit or Loss for the period from 1 July 2019 to 30 June 2022.

Historical Statement of Profit or Loss	Audited Financial		
	\$A	Year ended 30-Jun-20	Year ended 30-Jun-21
Revenue	-	-	-
Sales of sample quartz products	-	-	-
Cost of sales	-	-	-
Gross Profit	-	-	-
Interest income	2,839	-	-
Expenses			
Other expenses	(360,237)	(39,226)	(124,271)
Share of losses of associates accounted for using equity method	-	(74,349)	(59,781)
Director fees	(269,150)	(148,950)	(121,125)
Legal and Consulting fees	(714,785)	(134,522)	(481,021)
Tenement Holding & Exploration costs	-	-	(348,012)
Profit / (loss) before income tax	(1,341,333)	(397,047)	(1,134,210)
Income tax benefit/(expense)	-	-	-
Profit / (loss) for the year	(1,341,333)	(397,047)	(1,134,210)
Foreign currency translation	(5,775)	12,033	-
Profit / (loss) after income tax expense from continuing operations	(1,341,333)	(397,047)	(1,134,210)
Profit / (loss) after income tax expense from discontinued operations	(1,789,086)	(1,940,562)	945,626
Total comprehensive income / (loss)	(3,136,194)	(2,325,576)	(188,584)
Total comprehensive income / (loss) for the year is attributable to:			
Non-controlling interests	-	(410,666)	-
Owners of Greentech	(3,136,194)	(1,914,910)	(188,584)
Total comprehensive income / (loss) for the year	(3,136,194)	(2,325,576)	(188,584)
Total comprehensive income for the year is attributable to:			
Continuing operations	(1,347,108)	(385,014)	(1,134,210)
Discontinued operations	(1,789,086)	(1,940,562)	945,626
Total	(3,136,194)	(2,325,576)	(188,584)

9.5 Historical Statement of Cash Flows

The table below presents the Historical Statement of Cash Flows for the period from 1 July 2019 to 30 June 2022.

Historical Statement of Cash Flows	Audited Financial			
	\$A	Year ended 30-Jun-20	Year ended 30-Jun-21	Year ended 30-Jun-22
Cash Flows from Operating Activities				
Receipts from samples sold		9,374	-	-
Payments to suppliers and employees		(650,102)	(970,183)	(393,600)
Interest received		2,838	-	-
Net Cash Used in Operating Activities		(637,890)	(970,183)	(393,600)
Cash Flows from Investing Activities				
Payments for plant upgrades and initial refurbishment activities		(1,337,641)	-	-
Payments for exploration and evaluation activities - capitalised		(272,825)	(29,696)	-
Payments for exploration and evaluation activities - expensed		-	-	(348,012)
Proceeds generated on disposal of discontinued operations		-	310,540	-
Net Cash Used in Investing Activities		(1,610,466)	280,844	(348,012)
Cash Flows from Financing Activities				
Proceeds from borrowings		-	240,000	1,577,831
Payments for capital raising		1,537,500	342,500	-
Net Cash Provided by Financing Activities		1,537,500	582,500	1,577,831
Net increase/decrease in cash and cash equivalents		(710,856)	(106,839)	836,219
Cash and cash equivalents at the beginning of the financial year		838,017	114,784	7,945
Effects of exchange rate changes on cash and cash equivalents		(12,377)	-	-
Cash and cash equivalents at end of year / period		114,784	7,945	844,164

9.6 Historical Statement of Financial Position

The table below presents the Historical Statement of Financial Position as at 30 June 2022.

Historical Statement of Financial Position	Audited Financial			
	\$A	Year ended 30-Jun-20	Year ended 30-Jun-21	Year ended 30-Jun-22
Current Assets				
Cash and cash equivalents		114,784	7,945	844,164
Trade and other receivables		18,944	26,239	27,618
Prepayments		27,381	23,736	-
Assets associated discontinued operations		1,500,917	-	-
Total Current Assets		1,662,026	57,920	871,782
Non-Current Assets				
Investment in associates		250,000	300,651	240,870
Tenement assets		1,090,065	1,119,760	1,119,760
Total Non-Current Assets		1,340,065	1,420,411	1,360,630
Total Assets		3,002,091	1,478,331	2,232,412
Current Liabilities				
Trade and other payables		176,204	135,942	430,291
Director benefits		350,491	90,360	16,472
Liabilities associated with discontinued operations		900,917	615,465	-
Total Current Liabilities		1,427,612	841,767	446,763
Non-Current Liabilities				
Borrowings		-	240,000	240,000
Liabilities associated with discontinued operations		-	330,161	-
Total Non-Current Liabilities		-	570,161	240,000
Total Liabilities		1,427,612	1,411,928	686,763
Net Assets		1,574,479	66,403	1,545,649
Equity				
Issued capital		29,323,052	30,110,897	31,336,754
Reserves		196,302	237,990	679,963
Accumulated losses		(28,355,541)	(30,282,484)	(30,471,068)
Non-controlling interest		410,666	-	-
Total Equity		1,574,479	66,403	1,545,649

9.7 Pro Forma Statement of Financial Position

The table below sets out the pro forma adjustments that have been incorporated into the Pro Forma Statement of Financial Position as at 30 June 2022.

The pro forma adjustments reflect the financial impact of the Offer and other transactions as if they had occurred at 30 June 2022.

The Pro Forma Statement of Financial Position is provided for illustrative purposes only and is not represented as necessarily indicative of the Company's financial position.

A\$	Audited Historical	Pro forma Historical (Minimum Subscription)		Pro-Forma Historical (Maximum Subscription)	
	Year ended 30-Jun-22	Pro-forma adjustments	Year ended 30-Jun-22	Pro-forma adjustments	Year ended 30-Jun-22
ASSETS					
CURRENT ASSETS					
Cash and cash equivalents	844,164	3,834,584	4,678,748	5,704,584	6,548,748
Trade and other receivables	27,618	-	27,618	-	27,618
TOTAL CURRENT ASSETS	871,782	3,834,584	4,706,366	5,704,584	6,576,366
NON-CURRENT ASSETS					
Investment in associates	240,870	-	240,870	-	240,870
Tenement assets	1,119,760	350,000	1,469,760	350,000	1,469,760
TOTAL NON-CURRENT ASSETS	1,360,630	350,000	1,710,630	350,000	1,710,630
TOTAL ASSETS	2,232,412	4,184,584	6,416,996	6,054,584	8,286,996
LIABILITIES					
CURRENT LIABILITIES					
Trade and other payables	430,291	-	430,291	-	430,291
Director benefits	16,472	-	16,472	-	16,472
TOTAL CURRENT LIABILITIES	446,763	-	446,763	-	446,763
NON-CURRENT LIABILITIES					
Borrowings	240,000	-	240,000	-	240,000
TOTAL NON-CURRENT LIABILITIES	240,000	-	240,000	-	240,000
TOTAL LIABILITIES	686,763	-	686,763	-	686,763
NET ASSETS	1,545,649	4,184,584	5,730,233	6,054,584	7,600,233
EQUITY					
Issued capital	31,336,754	4,462,735	35,799,489	6,347,363	37,684,117
Reserves	679,963	48,099	728,062	48,099	728,062
Accumulated losses	(30,471,068)	(326,250)	(30,797,318)	(340,878)	(30,811,946)
TOTAL EQUITY	1,545,649	4,184,584	5,730,233	6,054,584	7,600,233

9.8 Pro forma adjustments

- (a) Adjustments to 'Cash and cash equivalents' include the issue by the company of 25,000,000 Ordinary Fully Paid Shares for the minimum subscription and 35,000,000 for the maximum subscription, issued at \$0.20 each, raising \$5,000,000 and \$7,000,000 respectively, less the Expenses of the Offer, an amount of \$350,000 payable under the Millungera Energy Minerals Pty Ltd (MEM) Acquisition Agreement (the 'MEM Agreement'), subject to a liquidity event as defined in the agreement occurring, for which Greentech Minerals Limited's ordinary shares being listed on the ASX qualifies, share options issued as detailed in point (d) below and a cash settlement of a contingent liability for unpaid directors' fees dating back to 2018 amounting to \$135,416. As approved at 2018 EGM the outstanding fees will be paid only upon the successful listing of Greentech on the ASX.
- (b) The adjustment to 'Tenement assets' of \$350,000 relates to the MEM Agreement as detailed in point (a) above.
- (c) Pro forma adjustments to 'Issued capital' include a the respective maximum and minimum subscription amounts as detailed in point (a) above, a write off against issued capital of a portion of the estimated remaining Expenses of the Offer of to be paid \$549,166 (Minimum Subscription) and \$664,538 (Maximum Subscription), and 300,000 shares issued to Mr Campbell Jones effective from his date of employment, these shares have been valued at the listing price of \$0.20.
- (d) 'Reserves' have been adjusted by the fair value grant date valuation of 500,000 options granted to Novus Capital and 100,000 options granted to Prandium Capital, performed by Stantons Corporate Finance Pty Ltd, amounting to \$48,099.

9.9 Significant Accounting Policies

(a) Basis of Preparation

Historical Cost Convention

The Financial Information has been prepared on an accruals basis and is based on historical costs. Cost is based on the fair values of the consideration given in exchange for assets. The Financial Information has also been prepared in accordance with the recognition and measurement principles of Australian Accounting Standards, and other authoritative pronouncements of the Australian Accounting Standards Board.

(b) Going concern

For the year ended 30 June 2022, the Company is reporting a total comprehensive loss of \$188,584 (FY2021: losses of \$2,325,576). The year's activity resulted in cash outflows from operations of \$393,600 (FY2021: \$970,183).

Notwithstanding these results, the Board has prepared the financial statements on the basis that the Company is a going concern, which contemplates the continuance of normal business activities, realisation of assets and settlement of liabilities in the normal course of business over the next 12-month period. The board has formed its view after considering the following:

- the Company having raised new capital, amounting to net \$1,577,831 during the year ended 30 June 2022 to provide working capital and to support the preparation of the Company's listing on the ASX during the 2nd quarter of the new financial year;
- the Company having appointed a broker in May 2022 with the mandate to raise and secure a minimum of \$5 million for additional working capital requirements to allow for the commencement of mining activities at its tenement holdings in the Mount Isa region;
- the Directors having prepared budgets and cash flow forecasts which outlined the Company's current and future working capital requirements allowing the Directors to closely monitor and control all cash requirements of the Company.

However, the Directors are acutely aware that the viability of the Company and its ability to continue as a going concern and to meet its debt commitments as and when they become

due, are contingent upon the Company being successful in raising additional capital and to commence production and sales of its high purity quartz feedstock.

These conditions, along with the Company's financial position and performance to date, indicate that a material uncertainty exists that may cast significant doubt on the entity's ability to continue as a going concern and, therefore, that it may be unable to realise its assets and discharge its liabilities in the normal course of business.

The accounts do not include any adjustments to the classification nor carrying value of recorded assets and liabilities. The financial statements are therefore prepared on the assumption that the Company is a going concern and will continue its operations for the foreseeable future.

(c) Income tax

The charge for current income tax is based on the profit/loss for the year adjusted for any non-assessable or disallowed items. It is calculated using the rates that have been enacted or are substantively enacted by the balance date.

Deferred tax is accounted for using the liability method in respect of temporary differences arising between the tax base of assets and liabilities and their carrying amounts in the financial statements. No deferred income tax will be recognised from the initial recognition of an asset or liability, excluding a business combination, where there is no effect on accounting or taxable profit or loss.

Deferred tax is calculated at the tax rates that are expected to apply to the period when the asset is realised or liability is settled. Deferred tax is credited in the statement of profit or loss and other comprehensive income except where it relates to items that may be credited directly to equity, in which case the deferred tax is adjusted directly against equity.

Deferred income tax assets are recognised to the extent that it is probable that future profit will be available against which deductible temporary differences can be utilised.

The amount of benefits brought to account or which may be realised in the future is based on the assumption that no adverse change will occur in income taxation legislation and the anticipation that the Company will derive sufficient future assessable income to enable the benefit to be realised and comply with the conditions of deductibility imposed by the law.

(d) Cash and cash equivalents

Cash and cash equivalents include cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

(e) Exploration and evaluation expenditure

Exploration and evaluation expenditure in relation to separate areas of interest for which rights of tenure are current is carried forward as an asset in the statement of financial position where it is expected that the expenditure will be recovered through the successful development and exploitation of an area of interest, or by its sale; or exploration activities are continuing in an area and activities have not reached a stage which permits a reasonable estimate of the existence or otherwise of economically recoverable reserves. Where a project or an area of interest has been abandoned, the expenditure incurred thereon is written off in the year in which the decision is made.

(f) Revenue

Revenue is recognised to the extent that it is probable that the economic benefits will flow to the Company and the revenue can be reliably measured.

Interest revenue is recognised on a proportional basis taking into account the interest rates applicable to the financial assets.

All revenue is stated net of the amount of goods and service tax (GST).

(g) Trade and other payables

These amounts represent liabilities for goods and services provided to the Company prior to the end of the financial period which are unpaid. The amounts are unsecured and are usually paid within 30 days of recognition.

Due to their short-term nature, they are measured at amortised cost and are not discounted.

(h) Goods and Services Tax (GST)

Revenues, expenses and assets are recognised net of the amount of associated GST, unless the GST incurred is not recoverable from the tax authority. In this case it is recognised as part of the cost of the acquisition of the asset or as part of the expense. Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the tax authority is included in other receivables or other payables in the statement of financial position. Cash flows are presented on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to the tax authority, are presented as operating cash flows. Commitments and contingencies are disclosed net of the amount of GST recoverable from, or payable to, the tax authority.

(i) Fair value measurement

Assets and liabilities measured at fair value are classified into three levels, using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. Classifications are reviewed at each reporting date and transfers between levels are determined based on a reassessment of the lowest level of input that is significant to the fair value measurement.

For recurring and non-recurring fair value measurements, external valuers may be used when internal expertise is either not available or when the valuation is deemed to be significant. External valuers are selected based on market knowledge and reputation. Where there is a significant change in fair value of an asset or liability from one period to another, an analysis is undertaken, which includes a verification of the major inputs applied in the latest valuation and a comparison, where applicable, with external sources of data.

(j) Issued Capital

Ordinary shares are classified as equity. Incremental costs directly attributable to the issue of new shares or options are shown in equity as a deduction, net of tax, from the proceeds.

(k) Share-based payments

Equity settled transactions:

The Company provides benefits to employees (including senior executives) of the Company in the form of share-based payments, whereby employees render services in exchange for shares or rights over shares (equity settled transactions).

The cost of equity-settled transactions with employees is measured by reference to the fair value of the equity instruments at the date at which they are granted. The fair value is determined by an external valuer using the Black & Scholes option-pricing model. In valuing equity-settled transactions, no account is taken of any performance conditions, other than conditions linked to the price of the shares of the Company. The cost of equity-settled transactions is recognised, together with a corresponding increase in equity, over the period in which the performance and/or service conditions are fulfilled, ending on the date on which the relevant employees become fully entitled to the award (the vesting period).

The cumulative expense recognised for equity-settled transactions at each reporting date until vesting date reflects (i) the extent to which the vesting period has expired and (ii) the Company's best estimate of the number of equity instruments that will ultimately vest. No adjustment is made for the likelihood of market performance conditions being met as the effect of these conditions is included in the determination of fair value at grant date. The statement of profit or loss and other comprehensive income charge or credit for a period represents the movement

in cumulative expense recognised as at the beginning and end of that period. No expense is recognised for awards that do not ultimately vest, except for awards where vesting is only conditional upon a market condition.

If the terms of an equity-settled award are modified, as a minimum an expense is recognised as if the terms had not been modified. In addition, an expense is recognised for any modification that increases the total fair value of the share-based payment arrangement, or is otherwise beneficial to the employee, measured at the modification date.

If an equity-settled award is cancelled, it is treated as if it had vested on the date of cancellation, and any expense not yet recognised for the award is recognised immediately. However, if a new award is substituted for the cancelled award and designated as a replacement award on the date that it is granted, the cancelled and new award are treated as if they were a modification of the original award, as described in the previous paragraph.

The dilutive effect, if any, of outstanding options is reflected as additional share dilution in the computation of earnings per share.

9.10 Cash and cash equivalents

The reviewed pro forma cash and cash equivalents is set out below:

A\$	Minimum Subscription	Maximum Subscription
Audited cash and cash equivalents as at 30 June 2022	844,164	844,164
Pro forma adjustments:	(485,416)	(485,416)
Proceeds from shares issued under the Offer	5,000,000	7,000,000
Cash issue costs payable as a result of Offer	(680,000)	(810,000)
Total pro forma adjustments	3,834,584	5,704,584
Pro forma cash and cash equivalents	4,678,748	6,548,748

9.11 Issued capital

The reviewed pro forma issued capital is set out below:

A\$	Minimum Subscription	Maximum Subscription
Audited issued capital as at 30 June 2022	31,336,754	31,336,754
Pro forma adjustments:	60,000	60,000
Issue of shares under the Offer	5,000,000	7,000,000
Costs associated with the Offer applied against issued capital	(549,166)	(664,538)
Issue of options to Lead Manager	(48,099)	(48,099)
Total pro forma adjustments	4,462,735	6,347,363
Pro forma issued capital	35,799,489	37,684,117

9.12 Reserves

The reviewed pro forma reserves are set out below:

	A\$
Audited reserves as at 30 June 2022:	679,963
Pro forma adjustments: Issue of options to Lead Manager	48,099
Total pro forma adjustments: Pro forma reserves	728,062

The Options to be issued to the Lead Manager are defined as share-based payments. The valuation of share-based payment transactions is measured by reference to the fair value of the equity instruments at the date at which they are granted. The fair value is determined using the Black-Scholes model, taking into account the terms and conditions upon which the options were granted.

Valuation of Options issued to Lead Manager and Advisor

The grant of 500,000 Options, with an exercise price of \$0.30 and expiring 24 months from the date the Company lists on the ASX to the Lead Manager of the Offer has been determined to have a total fair value of \$35,818. Refer to [Section 2](#) and [Section 11](#) for further details regarding the Lead Manager Options. See below for the option valuation assumptions.

The grant of 100,000 Options, with an exercise price of \$0.30 and expiring 60 months from the date the Company lists on the ASX to the Lead Manager of the Offer has been determined to have a total fair value of \$12,281. Refer to [Section 2](#) and [Section 11](#) for further details regarding the Lead Manager Options. See below for the option valuation assumptions.

The following assumptions were used to value the Lead Manager Options	Tranche 1	Tranche 2
Exercise Price	\$0.30	\$0.30
Expected volatility	85%	85%
Implied option life	2 years	5 years
Risk free rate	2.834%	3.071%
Expected dividend yield	nil	nil

10. INDEPENDENT LIMITED ASSURANCE REPORT

12 October 2022

The Directors
Greentech Minerals Ltd
Suite 3101
264 George Street
Sydney NSW 2000

Dear Directors

Greentech Minerals Ltd – Independent Limited Assurance Report

1. Introduction

William Buck Corporate Advisory Services (NSW) Pty Ltd (“William Buck CA”) has been engaged by the directors of Greentech Minerals Ltd ACN 115 050 452 (“Greentech” or the “Company” or the “Directors”) to prepare this Independent Limited Assurance Report (“this Report”) report for inclusion in the prospectus to be issued by the Company and dated on or about 12 October 2022 (the “Prospectus”) in respect of the initial public offering of fully paid ordinary shares in the Company (the “Offer”) and admission to the Australian Securities Exchange.

William Buck holds an appropriate Australian Financial Services Licence (AFSL 240769) under the Corporations Act 2001 for the issue of this report.

All terms used in this Report have the same meaning as the terms used and defined in the Prospectus unless otherwise defined in this Report.

2. Statutory Historical and Pro Forma Financial Information

This Report deals with the statutory historical financial information and pro forma historical financial information included in Section 9 (Historical Financial Information) of the Prospectus which comprises:

- Historical statements of profit or loss and other comprehensive income for the financial years ended 30 June 2020 (‘FY2020’), 30 June 2021 (‘FY2021’) and 30 June 2022 (‘FY2022’);
 - Historical statements of financial position as at 30 June 2020, 30 June 2021 and 30 June 2022; and
 - Historical statements of cash flows for the financial years ended FY2020, FY2021 and FY2022.
- as set out in Sections 9.4 to 9.6 of the Prospectus (together, the “Historical Financial Information”),
- Pro forma historical statement of financial position as at 30 June 2022.
- as set out in Section 9.7 of the Prospectus (the “Pro Forma Historical Financial Information”),

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William Buck is an association of firms, each trading under the name of William Buck across Australia and New Zealand with affiliated offices worldwide.
Liability limited by a scheme approved under Professional Standards Legislation.



- The basis of preparation and presentation of the Historical Financial Information;
 - The significant accounting policies adopted in the preparation of the Historical Financial Information; and
 - The assumptions adopted in compiling the Pro Forma Historical Financial Information;
- as set out in Sections 9.2, 9.3, and 9.8 to 9.12 of the Prospectus, respectively.

The Historical Financial Information has been prepared in accordance with the stated basis of preparation, being the Australian Accounting Standards and Interpretations issued by the Australian Accounting Standards Board (“AASB”), as appropriate for for-profit entities. The Historical Financial Information was extracted from the audited statutory financial statements of Greentech Minerals Ltd for FY2020, FY2021 and FY2022. The financial statements for FY2020, FY2021 and FY2022 were audited by William Buck (“William Buck Audit”).

The FY2020, FY2021 and FY2022 opinions on the financial statements, issued by William Buck Audit, were unmodified; however, did draw attention to a material uncertainty regarding going concern for FY2020, FY2021 and FY2022.

The Pro Forma Historical Financial Information is presented in the Prospectus in an abbreviated form and does not include all of the presentation and disclosures required by Australian Accounting Standards and other mandatory professional reporting requirements applicable to the general purpose financial reports prepared in accordance with the Corporations Act 2001 (Cth).

The Pro Forma Historical Financial Information has been prepared based on the Historical Financial Information of the Company for FY2022, after adjusting for the effects of pro forma adjustments described in sections 9.8, 9.10, 9.11 and 9.12 to reflect the operating and capital structure of the Company that will be in place on completion of the Offer as if it were in place on 30 June 2022. The stated basis of preparation is the recognition and measurement principles contained in Australian Accounting Standards and the Company’s adopted accounting policies applied to the pro forma adjustments as if those events or transactions had occurred as at the date of the Historical Financial Information. Due to its nature, the Pro Forma Historical Financial Information does not represent the Company’s actual or prospective financial position.

3. Directors Responsibility

The Directors of the Company are responsible for:

- the preparation and presentation of the Historical Financial Information, including the assumptions and significant accounting policies on which they are based, and selection and determination of the pro forma adjustments made to the Historical Financial Information and included in the Pro Forma Historical Financial Information; and
- the information contained within this prospectus.

We disclaim any responsibility for any reliance on this Report or the Financial Information to which it relates for any purpose other than that for which it was prepared. This Report should be read in conjunction with the full Prospectus. The Directors are not making any forecasts with respect to the future earnings of the Company.

4. Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Historical Financial Information and Pro Forma Historical Financial Information, based on the procedures performed and the evidence we have obtained.

We have conducted an independent review of the Historical Financial Information included in Section 9 of the Prospectus in order to state whether, on the basis of the procedures described, anything has come to our attention that would indicate that:

- The Historical Financial Information is not presented fairly, in all material respects, in accordance with the stated basis of preparation as summarised in Section 9.2 of the Prospectus; and
- The Pro Forma Historical Financial Information is not presented fairly, in all material respects, in accordance with the stated basis of preparation as set out in Section 9.3 of the Prospectus.

Our review has been conducted in accordance with the Australian Standard on Assurance Engagements (“ASAE”) 3450 Assurance Engagements involving Corporate Fundraisings and/or Prospective Financial Information, issued by the Auditing and Assurance Standards Board.

A limited assurance engagement consists of making enquiries, primarily of persons responsible for financial and accounting matters, observation of processes performed, inspection of documents, evaluating the appropriateness of supporting documentation and agreeing or reconciling with underlying records and applying analytical and other review procedures. A limited assurance engagement is substantially less in scope than an audit conducted in accordance with Australian Auditing Standards and consequently does not enable us to obtain reasonable assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

5. Conclusions

Based on our review, which is not an audit, nothing has come to our attention which causes us to believe that:

- a. the Historical Financial Information is not presented fairly, in all material respects, in accordance with the stated basis of preparation as described in Section 9.2 of the Prospectus; and
- b. the Pro Forma Historical Financial Information is not presented fairly, in all material respects, in accordance with the stated basis of preparation as described in Section 9.3 of the Prospectus.

6. Emphasis of Matter

Without qualification to the opinion expressed above, we draw attention to Section 9.9 in the Prospectus which indicates Greentech incurred a loss for FY2022 of \$188,584 and had cash outflows from operations for FY2022 of \$393,600. These conditions indicate that a material uncertainty exists that may cast doubt on the Company’s ability to continue as a going concern.

Notwithstanding the above, the Directors believe that there are reasonable grounds that Greentech will be able to continue as a going concern, for the reasons set out in Section 9.9 of the Prospectus.

7. Restrictions on Use

Without modifying our conclusion, we draw attention to Section 9 of the Prospectus, which describes the purpose of the Historical Financial Information, being for inclusion in the Prospectus. As a result, the Historical Financial Information may not be suitable for use for another purpose.

8. Consent

William Buck consents to the inclusion of this Report in the Prospectus in the form and context in which it is included. At the date of this Report, our consent has not been withdrawn. William Buck has not authorised the issue of the Prospectus and accordingly makes no representation regarding, and takes no responsibility for, any other documents or material in, or omissions from, the Prospectus.

9. Liability

The liability of William Buck is limited to the inclusion of this Report in the Prospectus. William Buck makes no representation regarding, and has no liability for, any other statements, or other material in, or omissions from, the Prospectus.

10. Declaration of Interest

William Buck has prepared this Report for inclusion in the Prospectus. We have not acted in any other capacity in relation to the Prospectus and have not been involved in the preparation of any part thereof.

William Buck does not have any interest in the outcome of the Offer, or any other interest that could reasonably be regarded as being capable of affecting its ability to give an unbiased conclusion in this matter. William Buck will receive normal professional fees for the preparation of this Report.


Yours sincerely,

William Buck Corporate Advisory Services (NSW) Pty Ltd

ABN 50 133 845 637

Authorised Representative No. 333393

AFSL 240769



Mark Calvetti

Director

11. MATERIAL CONTRACTS

11.1 General

It is considered that each of the documents described below is a contract that is material to the operations and affairs of the Company and which prospective investors and their advisers would reasonably expect to be disclosed in this Prospectus to enable an informed decision to be made regarding the offer. The information supplied is only a summary of the terms of each contract and to gain a complete understanding of a particular contract it is necessary to read it.

Non-Executive Director Service Agreements with Dr Michael Etheridge, Mr. Michael Ivkovic, Mr Campbell Jones and Mr. Stephen Ross.

11.1.1 Summary

The Company has entered into Non- Executive Service Agreements (Service Agreement) with the following:

- Mr Michael Ivkovic (Non-Executive Director) on 1 June 2020
- Dr Michael Etheridge (Non-Executive Chairman) on 23 May 2021
- Mr Stephen Ross (Non-Executive Director) on 1 October 2021
- Mr Campbell Jones (Non-Executive Director) on 1 August 2022

Under each Service Agreement, each Non-Executive Director:

- i. is appointed subject to the Company's Corporate Governance Principles, Corporations Act and ASX Listing Rules;
- ii. receives an annual fee as set out below plus expenses in accordance with the Company's Constitution;
- iii. is indemnified for their acts performed as a director, subject to the Corporations Act;
- iv. is provided with director and officer liability insurance coverage;
- v. is entitled to access to the books and records of the Company for a period of 3 years post termination in the event of litigation; and
- vi. is subject to a 12 month non-competition covenant from the date of the termination of his the Service Agreement.

Each Service Agreement is subject to the laws of New South Wales.

11.1.2 Related Party considerations

As each Director is considered to be a Related Party of the Company, the following statements are made for the purposes of ASIC Regulatory Guides 76.148 and 228.134:

(a) the value of the financial benefit of each Non-Executive Director is as follows;

Mike Etheridge (Non-Executive Chairman) - \$45,000.00 plus GST per annum which increases to \$75,000.00 plus GST per annum as from Listing.

Michael Ivkovic (Non-Executive Director) - \$45,000.00 plus GST per annum which increases to \$50,000.00 plus GST per annum as from Listing.

Stephen Ross (Non-Executive Director) - \$45,000.00 plus GST per annum which increases to \$50,000.00 plus GST per annum as from Listing.

Campbell Jones (Non-Executive Director) - \$45,000.00 plus GST per annum which increases to \$50,000.00 plus GST per annum as from Listing.

Non-Executive Directors to be reimbursed expenses so approved. The rate of remuneration to be reviewed and set by the Board after the first year, subject to Shareholder approval, if required.

In addition, any Non-Executive Director who chairs a Committee of the Board shall be entitled to an additional. \$5,000.00 plus GST per annum;

(b) the nature of the relationship;

Section 228(2)(a) of the Corporations Act states that a director of a public company is a Related Party of that company.. Each Non-Executive Director is a Related Party of the Company.

(c) whether the arrangement is on arm's length terms, is reasonable remuneration, some other Chapter 2E exception applies or we have granted relief;

The Board considers that each Service Agreement is at arm's length and constitutes reasonable remuneration within the meaning of section 210 and 211 of the Corporations Act. The Board also took the view that the proposed remuneration contained in each Service Agreement is reasonable having regard to the circumstances of the Company and the responsibilities of Messrs Ivkovic, Jones, Ross and Etheridge within the meaning of section 211(1) of the Corporations Act. The Board is sufficiently knowledgeable and experienced to have formed a sound judgment in respect of the terms of each Service Agreement, which was prepared by the Company's lawyers.

(d) whether member approval for the transaction has been sought and, if so, when;

The Board is of the view that the Service Agreements fall within the exemptions for the requirement for Shareholder approval as it has been assessed that the Service Agreements are, in the view of the Board, on arm's length and constitute reasonable remuneration (refer to sections 210 and 211 of the Corporations Act).

(e) the risks associated with the Related Party arrangement;

Risks in such arrangements include the power or opportunity of a Related Party to influence the decision making of non-interested directors to the detriment of the interests of members of the entity as a whole.

(f) the existence of any policies and procedures in place for entering into Related Party transactions;

The Board has adopted a Related Party Policy which in part includes a prohibition of an interested Director or entity who has a material personal interest to participate in voting whether at meeting or circular resolution where such interest is involved. Such policy extends to Board committee meetings.

The Company has also adopted a Corporate Governance Charter, which includes a duty to avoid conflicts. Non interested directors are required to exercise special vigilance and to make an independent assessment and seek advice from management, if and where applicable, in respect of the subject proposal. The Board has complied with such policy when executing the Service Agreements. Non interested directors are required to exercise special vigilance and to make an independent assessment and seek advice from management, if and where applicable, in respect of the subject proposal. The Board complied with such policy when executing the Service Agreements with the Directors. No interested Director voted nor was he present when the Board resolved to sign his Service Agreement with the Company.

11.2 Employment Agreement between the Company and Mr. Hugh Dai

11.2.1 Summary

On 1 October 2019, the Company signed an Employment Agreement with Mr Dai.

The salient terms of this Agreement are as follows:

- i. The salary before Listing is \$45,000 per annum plus superannuation;
- ii. The salary post Listing increases to \$125,000 per annum plus superannuation from the date of the Listing;
- iii. The initial term of the contract is three (3) years and will continue unless terminated in accordance with the Employment Agreement;
- iv. The Employment Agreement may be terminated by either party providing 6 months' written notice or payment in lieu of that notice unless the Employment Agreement is terminated for breach;
- v. Mr Dai is subject to a three (3) month post-employment non-solicitation and non-competition clause; and
- vi. The Employment Agreement is under the jurisdiction of New South Wales.

In addition to Mr Dai's role as a company director, Mr Dai's role includes marketing activities and negotiations with current and future offtake partners.

11.2.2 Related Party Considerations

The Board has adopted a Related Party Policy which in part includes a prohibition of an interested Director or entity who has a material personal interest to participate in voting whether at meeting or circular resolution where such interest is involved. Such policy extends to Board committee meetings.

The Company has also adopted a Corporate Governance Charter, which includes a duty to avoid conflicts. Non interested directors are required to exercise special vigilance and to make an independent assessment and seek advice from management, if and where applicable, in respect of the subject proposal. The

Board has complied with such policy when executing the Service Agreements. Non interested directors are required to exercise special vigilance and to make an independent assessment and seek advice from management, if and where applicable, in respect of the subject proposal. The Board complied with such policy when executing the Service Agreements with the Directors. No interested Director did not vote nor was he present when the Board resolved to sign his Service Agreement with the Company.

It is noted that Mr Dai is a director of the Company. Consequently, his Employment Agreement constitutes a "Related Party" transaction within the meaning of section 228(2)(a) of the Corporations Act and the following statements are made for the purposes of ASIC Regulatory Guides 76.148 and 228.134:

(a) the value of the financial benefit;

Mr Dai's annual salary is \$45,000.00 plus superannuation. His salary shall be increased to \$125,000.00 per annum as from Listing.

(b) the nature of the relationship;

Section 228(2)(a) of the Corporations Act states that a director of a public Company is a Related Party of that public company.

(c) **whether the arrangement is at arm's length terms, is reasonable remuneration, some other Chapter 2E exception applies or we have granted relief;**

The Board considers that it is reasonable in the circumstances to conclude that the terms of the Employment Agreement are on arm's length within the meaning of section 210 of the Corporations Act.

The Board also took the view that the proposed remuneration contained in the Employment Agreement is reasonable having regard to the circumstances of the Company and the responsibilities of Mr Dai within the meaning of section 211(1) of the Corporations Act.

The Board is sufficiently knowledgeable and experienced to have formed a sound judgment in respect of the terms of the Employment Agreement with Mr Dai, which was prepared by the Company's lawyers who have experience in such matters.

(d) **whether member approval for the transaction has been sought and, if so, when;**

The Board is of the view that the Employment Agreement falls within the exemptions for the requirement of Shareholder approval as it has been assessed that the Service Agreements are on arm's length and constitute reasonable remuneration (refer to sections 210 and 211 of the Corporations Act). the risks associated with the Related Party arrangement;

Risks in such arrangements include the power or opportunity of a Related Party to influence the decision making of non-interested directors to the detriment of the interests of members of the entity as a whole. In this case, there are no identifiable risks for the Company given the favourable terms in its favour.

Mr Dai has disclosed his material personal interests in relation to his Employment Agreement.

(e) **the existence of any policies and procedures in place for entering into Related Party transactions;**

The Board has adopted a Related Party Policy, which in part includes a prohibition of an interested Director who has a material personal interest to participate in voting whether at meeting or circular resolution where such interest is involved.

Such policy extends to Board committee meetings. The Company has also adopted a Corporate Governance Charter which includes a duty to avoid conflicts. Non interested directors are required to exercise special vigilance and to make an independent assessment and seek advice from management, if and where applicable, in respect of the subject proposal. The Board maintains it has complied with such policy when executing the Employment Agreement. Mr Dai was not present and did not vote when the Board approved the Employment Agreement.

11.3 Employment Agreement between the Company and Peter Crooks

11.3.1 Summary

Mr Peter Crooks and the Company entered into a fixed term employment agreement dated 16 June 2022 (**Original Agreement**). Under the Original Agreement:

1. Mr Crooks is appointed as Chief Executive Officer (CEO) of Greentech from 15 June 2022 to 30 September 2022 (or such later date as agreed between the parties: the parties have agreed to extend the initial term to 30 November 2022) subject to the Company achieving Listing; and
2. The salary is \$6,000 per month (plus superannuation)

This Original Agreement has been extended and varied by letter dated 6 October 2022 (**New Agreement**). The New Agreement terms set out in Schedule 1 to the New Agreement will apply once listing on the ASX is achieved on or prior to 30 November 2022 (**Listing Date**).

If listing is not achieved by the Listing Date or such other date agreed by the Company, both the Original and New Agreement terminate with immediate effect by mutual consent without any entitlement to notice or compensation.

Should the Company achieve Listing by the Listing Date, the terms set out in Schedule 1 to the New Agreement will apply as follows:

1. The employment will be on a full time basis;
2. Sign on Incentive: 500,000 Ordinary shares in the Company;
3. Probation period: 6 months with effect from 15 June 2022;
4. Notice period of termination by either party except as a result of serious misconduct: 6 months;
5. Base salary (excl superannuation): \$250,000 per annum;
6. Incentive pay: to be determined post probation subject to the meeting of key performance indicators focussed on the turnover and profits of the business in the medium to long term, the Corporations Act and the ASX Listing Rules; and
7. Reporting to the Board.

11.4 Loan Agreement between Hugh Dai and the Company (Loan)

(A) General

On 29 November 2021 Mr Dai and the Company entered into a loan agreement dated 29 November 2021 (Loan).

The salient Loan terms are as follows:

1. Loan amount: \$240,000
2. Interest: 0%
3. Type of Loan: Unsecured
4. Purpose:
 - a. Payment of business and operation expenses of the Company; and
 - b. Meeting the Company's obligations under the joint venture agreement between the Company and Lianyung Fulaide Quartz Technology Co., Ltd.
5. Repayment: The Loan is repayable:
 - a. Once the Company has achieved Listing; and
 - b. Mr Dai has issued a demand for payment no earlier than 12 months and 1 day after the Listing (Demand).
6. Once the Demand has been issued in accordance with the Loan, the loan becomes repayable in 5 payments:
 - a. \$50,000 within 3 Business Days of the Repayment Demand;
 - b. \$50,000 within 30 days of the Repayment Demand;
 - c. \$50,000 within 60 days of the Repayment Demand;
 - d. \$50,000 within 90 days of the Repayment Demand;
 - e. \$40,000 within 120 days of the Repayment Demand;
7. If the Company does not meet a Demand, Mr Dai has rights to seek recovery of the loan

Related Party Considerations

It is noted that Mr Dai is a director of the Company. Consequently, the Loan constitutes a "Related Party" transaction within the meaning of section 228(2)(a) of the Corporations Act and the following

statements are made for the purposes of ASIC Regulatory Guides 76.148 and 228.134:

1. the value of the financial benefit:

Mr Dai does not receive a financial benefit. The terms of the Loan do not favour him personally. It is the Company that obtains a financial benefit in the sum of \$240,000.00.

2. the nature of the relationship

Section 228(2)(a) of the Corporations Act states that a director of a public company is a Related Party of that public company.

3. whether the arrangement is on arm's length terms, is reasonable remuneration, some other Chapter 2E exception applies or we have granted relief;

The Board considers that it is reasonable in the circumstances to conclude that the terms of the Loan is on arm's length within the meaning of s 210 of the Corporations Act

The Board is sufficiently knowledgeable and experienced to have formed a sound judgment in respect of the terms of the Loan with Mr Dai, which was prepared by the Company's lawyers who have experience in such matters.

4. whether member approval for the transaction has been sought and, if so, when:

Shareholder approval is not required for the Loan given that it is, in the view of the Board, on arm's length and as such constitute exemption for such approval under sections 210 of the Corporations Act.

5. the risks associated with the Related party arrangement

Risks in such arrangements include the power or opportunity of a Related Party to influence the decision making of non-interested directors to the detriment of the interests of members of the entity as a whole. In this case, there are no identifiable risks for the Company given the favourable terms of the Loan in its favour.

6. the existence of any policies and procedures in place for entering into Related Party transactions;

The Board has adopted a Related Party Policy which in part includes a prohibition of an interested Director or entity who has a material personal interest to participate in voting whether at meeting or circular resolution where such interest is involved. Such policy extends to Board committee meetings (if applicable).

The Company has also adopted a Corporate Governance Charter, which includes a duty to avoid conflicts. Non interested directors are required to exercise special vigilance and to make an independent assessment and seek advice from management, if and where applicable, in respect of the subject proposal. The Board maintains it has complied with such policy when executing the Loan. Mr Dai did not vote nor was he present when the Board approved to sign of the Loan.

11.5 Lead Manager Agreement between Novus Capital Ltd (Novus) and the Company (Lead Manager Agreement)

On 19 May 2022, Novus and the Company signed the Lead Manager Agreement.

Under the Lead Manager Agreement, Novus shall:

1. provide financial and corporate advice prior to, and during, the proposed Listing of the Company;
2. raise capital and related services; and
3. provide corporate advice post Listing for a period of up to 6-12 months (Services).

In consideration for these services, Novus shall receive:

1. a one off payment of \$20,000.00;
2. a monthly retainer of \$10,000.00 up to a period of 4 months, unless extended by the parties;
3. a one off payment of \$25,000.00 upon lodgement of the Prospectus and commencement of the Offer period;
4. a 5% brokerage fee on all capital raised, except where the Company itself raises capital, which in this case, will be rebated at an agreed rate up to 80% of this fee;
5. a 1.25% management fee on all capital raised pursuant to the Prospectus;
6. an IPO Success Fee being \$50,000.00, 100,000 Shares and 500,000 Options at \$0.30 per Option to be exercised by within 2 years from the date of issue; and
7. an advisory fee of \$5,000.00 per month from Listing for at least 6 months. All fees and payments are inclusive of GST.

Novus can terminate the Lead Manager Agreement under clause 14, if:

1. the market conditions are not conducive for an IPO in the reasonable judgment of Novus;
2. if the Company commits a material breach;
3. there is material adverse change to Australian markets;
4. the Company has misrepresented information supplied to Novus;
5. the IPO is cancelled;
6. a Director is charged with an indictable offence;
7. a key person leaving the Company which may have a negative on the IPO; or
8. there is an investigation by ASIC in respect to the Company

The Company has also signed an indemnity in favour of Novus which provides that the Company cannot make a claim against Novus for any loss suffered by the Company as part of the IPO (excluding cases of bad faith or misconduct by Novus).

11.6 Integrated Corporate Solutions Agreement

On 28 December 2018 the Company entered into an agreement with Integrated Corporate Solutions (ICS) to act as coordinators for the Company in relation to the pre-Listing offering for the Company and to assist in the Listing by managing the completion of the necessary tasks which are required for the Company to be listed.

In consideration for services rendered by ICS has been paid \$50,000 plus GST and will be issued Shares at Listing as follows:

- if \$5M is raised, then 1.5M Shares shall be issued to ICS; and
- if between \$5M and \$7M is raised then, a further 500,000 Shares shall be issued.

11.7 Farm In Agreement with Multi Mines Pty Limited

On 1 January 2018 Millungera Energy Minerals Pty Ltd (MEM) and Multimines Ltd as Trustee for the Multimines Trust (Multimines), entered into a Farm-In Agreement giving Multimines the right to farm-in and acquire an interest in copper and all other minerals, except for quartz, Mining Lease named "ML100124" (EPM 25894) known as "May Downs".

At this stage, Multimines has a 20% interest in the mine for copper and all other minerals, except quartz.

11.8 Acquisition Agreement between the Company and M J Pustahya, P M Struthers, M F Power & R K Craig-Power and Moradi Matters Pty Ltd (ACN 153 570 3000) (the Vendors)

On the Vendors of MEM sold their shares in MEM to the Company pursuant to the Acquisition Agreement dated 2 October 2021 (Acquisition Agreement). In doing so, the Company acquired the Mining Lease named "ML100124" (EPM 25894) known as "May Downs".

Under this Acquisition Agreement, the Company is obliged to pay the Vendors a deferred sum of \$350,000.00 in the Vendors' respective proportions where the Company conducts a "Liquidity Event" which includes the Company listing its Shares on the ASX.

11.9 Royalty Agreement between the Vendors and MEM

On the 21 October 2016, the Vendors and MEM signed a Royalty Agreement.

Upon the Company selling its quartz product, MEM is obliged to pay a royalty subject as follows:

- (a) During the Royalty Period but subject to point (b) below, the Company must pay to the Vendors in their Respective Proportions (rounded to the nearest whole dollar), a royalty equal to:
 - (i) \$10 per metric tonne of Quartz Product and/or Other Product that is produced and sold by the Company to Offtakers and for which the Company has received payment in full, after the Commencement Date until the quantum of the Royalty payments equals or exceeds \$600,000; and
 - (ii) once the quantum of all Royalty payments equals or exceeds \$600,000; the greater of:
 - (A) 1% of the sale price (ex GST) under US\$500 per metric tonne, that is received by the Company in respect of Quartz Product and/or Other Product that is produced and sold by the company to Offtakers after the Commencement Date; and
 - (B) \$10 per metric tonne of Quartz Product and/or Other Product that is produced and sold by the Company, to Offtakers and for which the Company has received payment in full, after the Commencement Date at a sale price (ex GST) that is equal to or greater than US\$500 per metric tonne.
- (b) No Royalty will be payable under this agreement in respect of any Quartz Product and/or Other Product where the sale price (ex GST) for such product is less than US\$100 per metric tonne.
- (c) At this time, no royalties are payable to the Vendors.
- (d) Royalty Period commences when Quartz product is first sold by the MEM to an Offtake and ends 5 years later though no Royalty will be payable if the Quartz product is less than US\$100 per metric tonne.

11.10 Native Title Agreement between the State of Queensland (SOQ) , Kalkadoon Native Title Aboriginal Corporation RNTBC (ICN 7639) (KNT) and MEM (NT Agreement)

(a) Deed Regarding the Grant of Mining Lease 100124 between the State of Queensland (SOQ), Kalkadoon Native Title Aboriginal Corporation RNTBC (ICN 7639) (KNT) and MEM dated 23 May 2019 (Future Act Grant Deed)

The purpose of the Future Act Grant Deed is to obtain the consent of KNT, as the native title holder of the lands and waterways impacted by ML 100124, to conduct the activities permitted under ML 100124.

KNT has consented to ML 100124 pursuant to the Native Titles Act 1993 (Cth) (Native Titles Act).

The Future Act Grant Deed comes into effect from 23 May 2019, the date the last party, SOQ, executed this deed.

The term is for as long as ML 100124 is in force.

Compensation is payable to KNT pursuant to an ancillary agreement discussed further below.

(b) Agreement relating to Native Title and Mining between KNT and MEM

Agreement relates to native title and mining between KNT and MEM dated 18 April 2019 (**Ancillary Agreement**)

The Ancillary Agreement is linked to the Future Act Grant Deed and set out the terms upon which KNT is satisfied that ML100124 is granted.

The term of the Ancillary Agreement is from the date the last party signed the agreement being 18 April 2019 until ML100124 is cancelled, surrendered or expired. ML100124 is due to expire on 31 August 2024.

Under the Ancillary Agreement, MEM is required to:

1. Comply with the Cultural Heritage Protection Protocol prior to and when conducting its activities pursuant to ML100124;
2. Permit the KNT people to undertake their customary and traditional activities in the tenement area and take reasonable steps to minimise interference with this activity;
3. Provide employment and contracting opportunities to the KNT people;
4. Pay the KNT (or their nominated body):
 - a. \$5000 on the signing of the Future Act Grant Deed;
 - b. \$5000 on the grant of ML100124;
 - c. \$10,000 on the date mining commences;
 - d. An annual amount, the greater of \$20,000 or an amount equivalent to 0.5% of the net sale valued on the contained ore sold [or mined] from ML100124.
5. Rehabilitate the land to the extent required under legislation;
6. Employ at least two (2) of the KNT people during the rehabilitation process; and
7. Pay for the legal costs of the KNT in negotiating the Ancillary Agreement and the Future Act Grant Deed (up to \$5,500 excl GST) and any variation (up to \$750 excl GST).

Payments due to the KNT people are increased each year on 1 July in accordance with Consumer Price Index.

11.11 Capital Raising Arrangement with Spark Plus Pte Ltd (Unique Entity Number: 201628360M) (Spark)

On 14 April 2022, Greentech entered into an agreement with Spark for the provision of non – exclusive corporate advisory services for a period of six (6) months commencing 1 April 2022.

Spark is a registered Singaporean entity who have represented they are compliance with the Exempt Status regime provisions of the Monetary Authority of Singapore with regard to corporate finance activities.

The services provided by Spark include, inter alia,

1. Pre and post IPO roadshows;
2. Obtaining and collating feedback from investors;
3. Book building with the Lead Manager;
4. Marketing activities; and
5. Research activities.

The consideration for the services is:

1. US\$5,000 per month which is comprised of US\$2,500 in cash per month and the equivalent of US\$2,500 worth of Ordinary Shares in Greentech issued at the IPO price;
2. A success fee equal to 5% of the IPO funds raised from investors introduced by Spark; and
3. Payment of any pre-approved out of pocket expenses.

US\$15,000 (US\$7,500 cash and US\$7,500 equivalent in Ordinary Shares) will be invoiced and payable prior to the commencement of services with the balance being invoiced in July 2022 prior to completion of the term of the contract.

111,690 Ordinary Shares were issued on 9 September 2022 in satisfaction of the fee component to be paid via the issue of shares.

11.12 Consultancy Agreement with Prandium Capital Pty Ltd (Prandium)

By Agreement dated 9 August 2022, Prandium was engaged by the Company to provide certain services to the Company in relation to its proposed listing on the ASX.

These services include:

- (a) Reviewing and commenting on successive drafts of the Prospectus;
- (b) Liaising with ASX and lodging various submissions and applications to ASX;
- (c) Assisting with the capital raise under the Prospectus; and
- (d) Project managing the IPO, coordinating various workstreams and managing the external service providers.

Prandium has agreed a fee arrangement as follows:

1. Up to \$105,000 (plus GST) in cash paid on invoice subject to milestones; and
2. Options being issued to acquire 100,000 shares at \$0.30 per option and have a 5 year expiry from issue; and
3. 6% of any capital raised by Prandium pursuant to this Prospectus.

11.13 Compensation Agreement-May Downs Tenement

The agreement is dated 17 July 2018 between James Lyne Lord and Marjorie Annette Lord (Land Holder) and MEM (Compensation Agreement).

The Compensation Agreement is for the mining of the May Downs tenement ML 100124 and sets out the obligations of MEM as the Tenement Holder including, inter alia, payment obligations. The minimum contract amount payable pursuant to this Compensation Agreement is AUD\$312, 587 over a five (5) year term.

The reference schedule sets out the key details for the Compensation Agreement including, inter alia,

- (a) Tenement: ML 100124
- (b) Landholders: James Lyne Lord and Marjorie Annette Lord
- (c) Tenement Holder: Millungera Energy Minerals Pty Ltd (ACN 167 315 808)
- (d) Land: 24/SP265794
- (e) Term: 5 Years

The Term will be expiring on 16 July 2023 and there is no specific provision for an extension of the Compensation Agreement.

This Agreement is to be read in conjunction with the Mineral Resources Act 1989 (Qld) (the Act) and governs various aspects of access to ML 100124.

MEM must pay the following compensation to the Landholders:

1. One off payment for Landholders' time: \$5000
2. Annual \$1000 payment for ML term for Landholders' administration costs: On the assumption ML term means mining lease term and the mining lease being granted on 15 August 2019 until the end of the Compensation Agreement term \$4000
3. Total compensation payable (payable in equal annual instalments): \$293,457
4. \$500 per four (4) hours of the Landholders' time where it is requested or required in relation to any of the Activities but not including time spent on the road or roadworks or maintenance undertaken in accordance with condition 2 of Schedule 3: cannot estimate
5. \$150 (excl GST) per hour for use of Landholders' machinery: cannot estimate

General Conditions

The General Conditions sets out the parameters for the liability of MEM and indemnity to be made in favour of the Landholders.

The General Conditions also set out an obligation to rehabilitate the land and to have the requisite public liability insurance in the amount of AUD10,000,000.

11.14 Long Term Offtake Agreement between MEM and Jiangsu Yangshan Silicon Material Technology Co Ltd (JYSMT) dated 16 November 2017 (Offtake Agreement).

On 16 November 2017, MEM entered into the Offtake Agreement for a term of 5 years from the first shipment of HPQ.

Under the Offtake Agreement:

1. MEM is required to:
 - a. sell a minimum of 5,000 tonnes of Product per annum to the Buyer;
 - b. determine the price for the first shipment;
 - c. pay for the insurance and freight of the Product (CIF) to Lianyungang Port, China.
 - d. deliver the Product to Lianyungang Port, China
2. JYSMT is required to:
 - a. provide, prior to the first shipment, to MEM an unrestricted, irrevocable letter of credit valid for a period of 6 years for a sum required by the MEM in writing, acting reasonably having regard to its financial exposure under the Offtake Agreement;
 - b. pay all fees in relation to the letter of credit and any reinstatement should the letter of credit be drawn upon;
 - c. determine the buy price for all shipments after the first shipment;
 - d. pay all taxes and duties arising from the sale, export, import and transport of the product
 - e. reimburse MEM for the costs of freight and insurance of the product from the point of origin to Lianyungang Port in China.

Due to COVID-19 restrictions, the Company has been delayed in production and as such, the first shipment has not occurred.

A letter was received from JYSMT indicating the First Shipment is to be completed no later than the end of 2023, failing which, the parties will need to renegotiate or extend the Offtake Agreement.

11.15 Executive Share Option Plan

On 21 September 2022, the Board approved an Executive Share Option Plan in respect to the Company and its Group (ESOP).

Under the ESOP the Board may from time to time grant to an “eligible person” including a board member or senior manager including their spouse and children, options over unissued ordinary class shares in the Company.

The exercise price for options is determined by the Board.

The ESOP is subject to the Corporations Act, though should the Company become listed, the Listing Rules will apply to the ESOP.

If a member of the Board or employee has been issued options and ceases to be a member or employee prior to vesting, then the options will lapse. If already vested, then such will expire on 90 days unless the member or employee is terminated for dishonesty or fraud, in which case, the options lapse at the time the member or employee ceases to be a member or employee. As to death, all options that have not vested automatically lapse at death and if vested such lapse after 12 months.

If an option is subject to a vesting condition, it may only be exercised if it has vested and before it expires. Shares issued on exercise of an option, rank equally existing shares. Options will not be listed.

In event of any reorganisation of capital, the options will reflect such reorganisation.

12. ADDITIONAL INFORMATION

12.1 Rights Attaching to Shares

A summary of the rights attaching to the Shares under the Offer is detailed below. This summary is qualified by the full terms of the Constitution (a full copy of the Constitution is available from the Company on request free of charge) and does not purport to be exhaustive or to constitute a definitive statement of the rights and liabilities of Shareholders. These rights and liabilities can involve complex questions of law arising from an interaction of the Constitution with statutory and common law requirements. For a Shareholder to obtain a definitive assessment of the rights and liabilities which attach to the Shares in any specific circumstances, the Shareholder should seek legal advice.

(i) General Meetings

Shareholders are entitled to be present in person, or by proxy, attorney or representative to attend and vote at general meetings of the Company.

Shareholders may requisition meetings in accordance with Section 249D of the Corporations Act and the Constitution.

(ii) Voting

Subject to any rights or restrictions for the time being attached to any class or classes of Shares, at general meetings of Shareholders or classes of Shareholders:

- (i) each Shareholder entitled to vote may vote in person or by proxy or attorney;
- (ii) on a show of hands, every person present who is a Shareholder or a representative of a Shareholder has one vote in respect of each Share carrying the right to vote; and
- (iii) on a poll, every person present who is a Shareholder or a proxy, attorney or representative of a Shareholder shall, in respect of each Share held by him, or in respect of which he is appointed a proxy, attorney or representative, have one vote for each Share held, but in respect of partly paid shares shall have a fraction of a vote equivalent to the proportion which the amount paid up bears to the total issue price for the share.

(iii) Dividends

The Directors alone may declare a dividend to be paid to Shareholders. The dividend is payable at a time determined at the Directors' discretion. No dividend may be declared or paid except as allowed by the Corporations Act. No interest is payable in respect of unpaid dividends. The Directors may set aside the Company's profit any amount that they consider appropriate. This amount may be used in any way that profits can be used, and can be invested or used in the Company's business in the interim.

(iv) Winding Up

If the Company is wound up, the liquidator may, with the authority of a special resolution, divide among the Shareholders in kind the whole or any part of the property of the Company, and may for the purpose set such value as he considers fair upon any property to be so divided, and may determine how the division is to be carried out as between the Shareholders or different classes of Shareholders.

The liquidator may, with the authority of a special resolution of the Company, vest the whole or any part of any such property in trustees upon such trusts for the benefit of the contributories as the liquidator thinks fit, but so that no Shareholder is compelled to accept any Shares or other securities in respect of which there is liability.

(v) Transfer of Shares

Generally, Shares in the Company are freely transferable, subject to formal requirements, the registration of the transfer not resulting in a contravention of or failure to observe the provisions of a law of Australia and the transfer not being in breach of the Corporations Act and the Listing Rules.

(vi) Variation of Rights

Pursuant to section 246B of the Corporations Act, the Company may, with the sanction of a special resolution passed at a meeting of Shareholders vary or abrogate the rights attaching to Shares.

If at any time the share capital is divided into different classes of shares, the rights attached to any class (unless otherwise provided by the terms of issue of the shares of that class), whether or not the Company is being wound up, may be varied or abrogated with the consent in writing of the holders of three quarters of the issued shares of that class, or if authorised by a special resolution passed at a separate meeting of the holders of the shares of that class.

(vii) Shareholder Liability

As the Shares to be issued under the Offer contained in this Prospectus are fully paid shares, they are not subject to any calls for money by the Directors and will therefore not become liable for forfeiture.

(viii) Alteration of Constitution

The Constitution can only be amended by a special resolution passed by at least three quarters of Shareholders present and voting at the general meeting. In addition, at least 28 days' written notice must be given specifying the intention to propose the resolution as a special resolution.

12.2 Limitation on Foreign Ownership

Generally, the Foreign Acquisitions and Takeovers Act 1975 (Cth) (FATA) applies to acquisitions of shares and voting power in a Company of 20% or more by a single foreign person and its associates, or 40% or more by two or more un-associated foreign persons and their associates, where the acquisition meets a threshold value (which varies by investor type and industry).

In addition, FATA applies to acquisitions of a direct interest in an Australian Company by foreign governments and their related entities irrespective of the acquisition value. A 'direct interest' is an interest of 10% in the entity but may also include an interest of less than 10% where the investor has entered into business arrangements with the entity or the investor is in a position to influence or participate in the management and control or policy of the entity. There are exemptions which can apply to certain acquisitions.

Where FATA applies to the acquisition, the acquisition may not occur unless notice of it has been given to the Federal Treasurer and the Federal Treasurer has either notified that there is no objection to the proposed acquisition (with or without conditions) or a statutory period has expired without the Federal Treasurer objecting. An acquisition to which the FATA applies may be the subject of a divestment order by the Federal Treasurer unless the process of notification, and either a non-objection notification or expiry of a statutory period without objection, has occurred. Criminal offences and civil penalties can apply to failing to give notification of certain acquisitions, undertaking certain acquisitions without a no objection notification or contravening a condition in a no objection notice.

12.3 Dividend Policy

The Company's focus will be on the continued revenue growth of the underlying businesses conducted by the proposed wholly owned subsidiaries of the Company to derive earnings and profits for the benefit of all stakeholders.

It is noted that the ability of the Company to declare and pay dividends in the future will depend on the future profitability and financial position of the Company. The size and structure of any dividends will depend on the financial performance of the Company from time to time.

12.4 Financial Year

The financial year of the Company will end on 30 June annually.

12.5 Litigation

Each member of the Group is not the subject to any, or threatened, legal action.

12.6 Subsequent Events

There has not arisen, at the date of this Prospectus any item, transaction or event of a material or unusual nature not already disclosed in this Prospectus which is likely, in the opinion of the Directors of the Company to affect substantially:

- (a) the operations of the Company;
- (b) the results of those operations; or
- (c) the state of affairs of the Company.

12.7 Liability of other persons named in this Prospectus

Notwithstanding that they may have been referred to elsewhere in this Prospectus:

Eakin McCaffery Cox Lawyers are named in the Corporate Directory as the solicitors to the Company. They have been involved in the process of reviewing this Prospectus for consistency with the material contracts and advising the Company on those material contracts formed in Australia. In doing so, they have placed reasonable reliance upon information provided to them by the Company and other third parties. They do not make any other statement in this Prospectus. Eakin McCaffery Cox Lawyers will be paid for work performed in accordance with usual time based in charge out rates and estimate their professional costs at \$85,000 plus GST at the date of this Prospectus.

William Buck Accounting entity is named in the Corporate Directory as Investigating Accountant's to the Company. They are involved in the preparation of the Independent Limited Assurance Report in [Section 10](#) and review of the Historical Financial Information in [Section 9](#) of this Prospectus. In doing so, they have placed reasonable reliance upon information provided to them by the Company and other third parties. They do not make any other statement in this Prospectus. William Buck Accounting entity will be paid for work performed in accordance with usual time-based charge out rates and estimated their professional costs at \$50,000 plus GST as at the date of this Prospectus.

Prandium Capital Pty Ltd is acting as project manager to the IPO. They have been involved in the process of reviewing this Prospectus and project managing the IPO. In doing so, they have placed reasonable reliance upon information provided to them by the Company and other third parties. They do not make a statement in this Prospectus. Prandium Capital Pty Ltd be paid for work performed in accordance with usual time based in charge out rates and estimate their professional costs at \$105,000 plus GST at the date of this Prospectus.

12.8 Consents of Experts

Each of the parties referred to in this Section 12:

- (a) does not make, or purport to make, any statement in this Prospectus other than those referred to in this section; and
- (b) to the maximum extent permitted by law, expressly disclaim and take no responsibility for any part of this Prospectus other than a reference to its name and a statement included in this Prospectus with the consent of that the Boards specified in this section.

William Buck Audit entity given its written consent to being named as the Auditor and has not withdrawn its consent prior to lodgement of this Prospectus with the ASIC.

William Buck Accounting entity has given its written consent to being named as the Investigating Accountant in this Prospectus and to the inclusion of the Independent Limited Assurance Report in [Section 10](#) in the form and context in which the report is included. William Buck Accounting entity has not withdrawn its consent prior to lodgement of this Prospectus with the ASIC.

Eakin McCaffery Cox lawyers has given its written consent to being named as the solicitors to the Company in this Prospectus. Eakin McCaffery Cox lawyers has not withdrawn its consent prior to the lodgement of this Prospectus with the ASIC.

Automic Pty Ltd has given its written consent to being named as the Share registry for the Company in this Prospectus. Automic Pty Ltd has not withdrawn its consent prior to the lodgement of this Prospectus with the ASIC.

Derisk Geological Consultants has given its written consent to being named as the Independent Geologist in respect to the Australian Tenements in this Prospectus and to the inclusion of the Independent Geologist Report relating to those tenements in [Annexure A](#) in the form and context in which the report is included. Derisk Geological Consultants has not withdrawn its consent prior to lodgement of this Prospectus with the ASIC.

Hetherington Exploration & Mining Title Services QLD Pty Limited (Hetherington) has given its written consent to being named as the Independent Tenement Manager in respect to the Australian Tenements in this Prospectus and to the inclusion of the Independent Tenement in the form and context in which the report is included. Hetherington's has not withdrawn its consent prior to lodgement of this Prospectus with the ASIC.

Novus Capital Limited (Novus) has given and not withdrawn its written consent to be named as Lead Manager to the Company in the form and context in which they are so named. In addition, they have given and not withdrawn their written consent to the dispatch of this Prospectus. Novus does not accept any liability to any person in respect of any false or misleading statement in, or omission from, any part of this Prospectus.

Prandium Capital Pty Ltd has given and not withdrawn its written consent to be named as project manager to the Company in the form and context in which they are so named. In addition, they have given and not withdrawn their written consent to the dispatch of this Prospectus. Prandium does not accept any liability to any person in respect of any false or misleading statement in, or omission from, any part of this Prospectus.

Rom Resources has given its written consent to being named in the relation to the Resource Estimate Report in this Prospectus and to the inclusion of this JORC Report in the form and context in which the report is included. Rom Resources has not withdrawn its consent prior to lodgement of this Prospectus with the ASIC.

Exawatt has given its written consent to being referenced in this Prospectus and to the inclusion of certain references of its 2021 in this Prospectus in the form and context in which those references are included. Exawatt has not withdrawn its consent prior to lodgement of this Prospectus with the ASIC.

12.9 Inspection of Documents

Copies of following documents may be inspected free of charge at the registered office of the Company or at the offices of Eakin McCaffery Cox Level 28, BT Tower, 1 Market Street, Sydney NSW 2000 during normal business hours:

- (a) Material Contracts in [Section 11](#) of this Prospectus;
- (b) The Constitution; and
- (c) The consents referred to in this Section 12.

12.10 Expenses of the Offer

Table 12.1: Expenses of the Offer

Offer Costs			
Category	Total	Paid Already	Balance Payable from IPO Funds
Legal Fees	100,000	15,000	85,000
Accountancy Fees	25,000	19,400	5,600
Independent Limited Assurance Report	25,000		25,000
Independent Geologist Report	33,700	33,700	-
Share Registry Costs	25,000		25,000
ASIC Fees	3,000		3,000
ASX Listing Fees	105,000	5,000	100,000
Lead Manager Commission	312,500		312,500
Corporate Advisory Fees	105,000	61,100	43,900
Lead Manager	100,000	20,000	80,000
Total Costs of the Offer	\$834,200	\$154,200	\$680,000

12.11 Directors' Fees

The Constitution provides that the Non-Executive Directors are entitled to remuneration as determined by the Company in a general meeting of Shareholders to be apportioned among them in such manner as the Directors agree and, in default of agreement, equally. The aggregate maximum remuneration currently determined by the Company for the Chairman is \$45,000 per annum plus GST to increase to \$75,000 plus GST at Listing, while the remaining Non-Executive Directors currently entitled to \$45,000 per annum plus GST to increase to \$50,000 plus GST at listing. Non-Executive Directors are entitled to be reimbursed for properly incurred expenses and are entitled to a further \$5,000 per annum plus GST should chair a Board Committee.

At present the Board is constituted by five (5) Directors. If a Non-Executive Director performs extra services, which in the opinion of the Directors are outside the scope of the ordinary duties of the Director, the Company may remunerate that Director by payment of a fixed sum determined by the Directors in addition to or instead of the remuneration referred to above. However, no payment can be made if the effect would be to exceed the maximum aggregate amount payable to Non-Executive Directors.

A Non-Executive Director is entitled to be paid travelling and other expenses properly incurred by them in attending Director's or general meetings of the Company or otherwise in connection with the business of the Company.

The remuneration of any Executive Director may from time to time be fixed by the Directors as provided in his employment agreement. The remuneration may be by way of salary or commission or participation in profits but may not be by commission on, or a percentage of operating revenue. The salary of an Executive Director includes any director's fees.

Details of the Executive Director's remuneration is set out in [Section 11.2.1](#).

12.12 Interest of Experts and Advisers

No promoter or other person named in this Prospectus as having performed a function in a professional, advisory or other capacity in connection with the preparation or distribution of the Prospectus (or entity in which they are a partner or director) holds, has, or has had in the two years before the date of this Prospectus, any interest in:

- (a) the formation or promotion of the Company;
- (b) property acquired or proposed to be acquired by the Company in connection with its formation or promotion or the Offer; or
- (c) the Offer,

and no amounts have been paid or agreed to be paid and no value or other benefit has been given or agreed to be paid to a promoter or any person named in this Prospectus as having performed a function in a professional, advisory or other capacity in connection with the preparation or distribution of this Prospectus (or entity in which they are a partner or director), provided in connection with the formation or promotion of the Company or the Offer, except as follows and as disclosed in this Prospectus.

12.13 Directors' Interests

The nature and extent of the interest (if any) that the Directors of the Company hold, or held at any time during the last two (2) years in;

- (a) the formation or promotion of the Company;
- (b) property acquired or to be acquired by the Company in connection with:
 - (i) its formation or promotion; or
 - (ii) the Offer,

is set out in this Section 12.

The amount (if any) that anyone has paid or agreed to pay or the nature and the value of any benefit anyone has given or agreed to give to a Director of the Company, or proposed Director of the Company:

- to induce them to become, or to qualify as, a Director of the Company; or
- for services provided by a Director in connection with:
 - the formation of the Company; or
 - the Offer,

is set out in [Section 2.5](#) of this Prospectus and repeated in the table 12.2 (follows).

Table 12.2 below details the interest of the Directors in the securities of the Company immediately prior to lodgement of the Prospectus with ASIC, including those securities held directly and indirectly.

Table 12.2: Director's Interests in the Company

Director/Officer	Note	Number of Shares	%	Number of Options	%
Dr Michael Etheridge		300,000	2.31		
Mr Campbell Jones		300,000	2.31		
Mr Michael Ivkovic	1	0	0.00		
Mr Peter Crooks	2	500,000	3.85		
Mr Hugh Dai		11,591,064	89.22	833,334	100.00
Mr Stephan Ross		300,000	2.31		
TOTAL		12,991,064	100.00	833,334	

- (1) Mr Michael Ivkovic does not hold Shares or Options directly in the Company. A Related Party of Mr Ivkovic, being ICS, is entitled to be issued 1,500,000 Shares at Listing where the Minimum Subscription is achieved, Where the Maximum Subscription is met, then ICS shall be entitled to 2,000,000 Shares at Listing.
- (2) Mr Peter Crooks, the CEO of the Company will be entitled to be issued 500,000 Shares conditional on raising the Minimum Subscription and the successful listing of the Company on ASX.

12.14 Deeds of indemnity, insurance and access

The Company has entered into a deed of indemnity, insurance and access with each of its Directors. Under these deeds, the Company will agree to indemnify each officer to the extent permitted by the Corporations Act against any liability arising as a result of the officer acting as an officer of the Company. The Company will also be required to maintain insurance policies for the benefit of the relevant officer and allow the officers to inspect board papers in certain circumstances.

12.15 Taxation

The purchase and disposal of Shares in the Company will have tax consequences, which will differ depending on the individual financial affairs of each investor. All potential investors in the Company are urged to obtain independent financial advice about the consequences of acquiring Shares from a taxation viewpoint and generally.

To the maximum extent permitted by law, the Company, its officers and each of their respective advisors accept no liability and responsibility with respect to the taxation consequences of subscribing for New Shares under this Prospectus.

12.16 Privacy

By submitting an Application Form you are providing to the Company personal information about you. If you do not provide complete and accurate personal information, your Application may not be able to be processed.

The Company maintains the register of members of the Company through the Share Registry to comply with the National Privacy Principles while performing these services. The Company's register is required by law to contain certain personal information about you such as you name and address and number of Shares held. In addition, the Company collects personal information from members including contact details, bank accounts, membership details and tax file numbers.

This information is used to carry out registry functions such as payment of dividends, send announcements and half yearly reports, notices of meetings, newsletters and notifications to the

Australian Taxation Office. In addition, contact information will be used from time to time to inform members of new initiatives concerning the Company.

The Company understands how important it is to keep your personal information private. The Company will only disclose personal information the Company has about you:

- when you agree to the disclosure;
- when used for the purpose for which it is collected;
- when disclosure is required or authorized by law;
- to your broker;
- to external service suppliers who supply services in connection with the administration of the Company's register such as mailing houses and printers, Australia post and financial institutions.

You have the right to access, update and correct your personal information held by the Company and the Share Registry except in limited circumstances. If you wish to access, update or correct your personal information held by the Company or the Share Registry, please contact those respective offices.

If you have any questions concerning how the Company handles your personal information, please contact the Company Secretary.

12.17 Electronic Prospectus

An electronic version of this Prospectus is available from the Company at World Wide Web URL address www.greentechminerals.com.au

The Application Form may only be distributed attached to a complete and unaltered copy of this Prospectus. The Application Form included with this Prospectus contains a declaration that the investor has personally received the complete and unaltered Prospectus prior to completing the Application Form.

The Company will not accept a completed Application Form if it has reason to believe that the investor has not received a complete paper copy or electronic copy of the Prospectus or if it has reason to believe that the Application Form or electronic copy of the Prospectus has been altered or tampered with in any way.

While the Company believes that it is extremely unlikely that in the Offer period the electronic version of the Prospectus will be tampered with or altered in any way, the Company cannot give any absolute assurance that it will not be the case. Any investor in doubt concerning the validity or integrity of an electronic copy of the Prospectus should immediately request a paper copy of the Prospectus directly from the Company or a financial adviser.

12.18 Supplementary Information

The Company will issue a supplementary Prospectus if the Company becomes aware of any of the following between the issue of the Prospectus and the date the Company's Shares are quoted:

- A material statement in the Prospectus is misleading or deceptive.
- There is a material omission from the Prospectus
- There has been a significant change affecting a matter included in the Prospectus.
- A significant new circumstance has arisen and it would have been required to be included in the Prospectus.

Upon listing, the Company will be obliged to make continuous disclosure to the market in accordance with the Corporations Act and the Listing Rules. The Company has adopted a continuous disclosure policy.

The Company has not raised any capital for the 3 months before the date of issue of this Prospectus save as otherwise described in this Prospectus and will not need to raise any capital for 3 months after the date of issue of this Prospectus.

13. DIRECTOR'S STATEMENT AND CONSENT

Directors' consent to lodgement

This Prospectus is issued by the Company and its issue has been fully authorized by a resolution of the Directors.

In accordance with section 720 and section 351 of the Corporations Act, each Director has consented to the lodgement of this Prospectus with the ASIC.

Signed on behalf of the Company by:



Dr Michael Etheridge
Non-Executive Chairman

14. GLOSSARY & REFERENCES

These definitions are provided in this Glossary to assist investors in understanding some of the expressions used in this Prospectus:

Act means the Corporations Act 2001 (Cth)

AEDT means Australian Eastern Daylight Saving Time

AEST means Australian Eastern Standard Time

Applicant means a person or other entity who submits an Application Form

Application Form means the Application Form accompanying this Prospectus in [Section 15](#)

Application Monies means monies received from an Applicant pursuant to an Application Form

ASIC means Australian Securities & Investments Commission

ASX Settlement and Transfer Corporation Pty Limited or ASTC means ASX Settlement and Transfer Corporation Pty Ltd and (ACN 008 504 532)

Associate has the meaning given to this term as in Part 1, Division 2 of the Corporations Act

ASX or Australian Securities Exchange means ASX Limited (ABN 98 008 624 691), and the market operated by it as the context requires

Biggs (2022). EPM 25894 May Downs Quartz, 2022 Resource Estimate Report. Means Resource Estimate Report. Included in this Prospectus and [ANNEXURE C](#).

Board means the Board of Directors of the Company, as constituted from time to time.

CHES means Clearing House Electronic Sub Register System

Closing Date means 25 November 2022 or such other date as determined by the Directors

Company means Greentech Minerals Limited (ABN 85 115 050 452)

Constitution means the constitution of the Company as in force from time to time

Corporations Act means the Corporations Act, 2001 (Cth)

Director(s) means a Director of the Company, from time to time and Directors means all of them

Derisk (2022). Independent Geologist Report of the May Downs High Purity Quartz Project Mount Isa, Northwest Queensland, 27 October 2022. Included in this Prospectus as [ANNEXURE A](#)

Dollar, \$, \$A or AUD means the lawful currency of Australia

Exawatt and ANZAPLAN, 2021 means the report entitled "The Global Market for High-Purity Quartz, December 2021"

Exposure Period means the seven (7) day period beginning on the day when this Prospectus is lodged with ASIC, as may extended by ASIC for a further seven (7) days under section 727 (3) of the Corporations Act.

Farm-In Agreement means the agreement with Multimines Pty Ltd in relation to EPM 25894 as described in [Section 11.7](#)

Financial Year means the year ending 30 June

Glossary means this Glossary

Greentech means the Company

Group means the Company and its Subsidiary

GST has the meaning given in section 195-1 of the GST Act

GST Act means A New Tax System (Goods and Services Tax) Act 1999 as amended

Hetherington (2022). Independent Tenement Report by Hetherington Exploration & Mining Title Services (QLD) Pty Ltd, for Greentech Minerals Ltd. Included in this Prospectus as [ANNEXURE B](#).

Hi-Tech Materials means minerals that require processing enhancement to supply specific customers

HIN means Holder Identification Number

Holding Statements means statement of holdings as distributed by the Share Registry.

HPQ means high purity quartz

HPQF means high purity quartz feedstock being the unprocessed material used to make high purity quartz

Iceberg means exploration license defined in the Independent Geologist Report, [ANNEXURE A](#)

ICS means Integrated Corporation Solutions Pty Ltd (ABN 49 158 694 467) material contracts [Section 11.6](#)

IGR means Independent Geologist Report; see Derisk (2022), being [ANNEXURE A](#)

JORC means Joint Ore Reserves Committee

Offer Price means the sum of \$0.20 per New Share offered under this Prospectus

Lead Manager means Novus Capital Limited

Listing means listing of the Company's Shares including the New Shares on the ASX

Listing Rules means the official listing rules of the ASX

Maydowns means the mining license defined in Independent Geologist Report and known as ML 100124

MEM means Millungera Energy Minerals Pty Ltd ACN 167 315 808 a wholly owned subsidiary of the Company.

Minimum Subscription means 25,000,000 New Shares to be offered for subscription at \$0.20 cents each to raise \$5,000,000.00

Maximum Subscription means an additional 10,000,000 New Shares at \$ 0.20 cents for each to raise a further \$7,000,000.00, in excess of the Minimum Subscription

New Shares means a Share offered under the terms of this Prospectus and **New Shareholders** means parties that have subscribed for New Shares under this Prospectus

Offer means the offer of New Shares on the terms of the Prospectus

Official List means the Official List of the ASX

Official Quotation means the official quotation by the ASX in accordance with the Listing Rules

Option means an option to subscribe for a Share on the terms set out in [Section 2](#)

Offtake Agreement means long term sale of quartz as described in [Section 11.14](#)

Prandium means Prandium Capital Pty Ltd ABN 42 657 510 122 ASFSL CAR 001295632

Product means HPQF or HPQ

Prospectus means this Prospectus dated 28 October 2022

Related Body Corporate has the same meaning given to this term as in sections 9 and 50 of the Corporations Act

Related Party Transaction means a transaction between a Related Party of the Related Party has the meaning given to this term in section 228 of the Corporations Act

Related Party has the meaning given to this term in section 228 of the Corporations Act

Section means a section of this Prospectus

Seed Investors means those investors who acquired Shares prior to the lodgement of the Prospectus

Shares means ordinary class shares in the capital of the Company

Shareholder means a holder of Shares

Share Registry means Automic Pty Limited (ACN 152 260 814)

Significant Tenement means the Tenement known as "May Downs" being EPM 25894 and ML 100124 located in Queensland, Australia

Spark means Spark Plus Pte Ltd Unique Entity Number: 201628360M

Subsidiary has the meaning given to this term in section 46 of the Corporations Act

Tenements means the following four tenements owned by the Company including:

- (i) Mining Lease named "ML100124" known as "May Downs"; and
- (ii) Exploration permits named EPM19373, EPM26051, EPM26286 and EPM25894

Vendors means the former owners of Millungera Energy Minerals Pty Ltd, being Michael Pustahya, Phillip Struthers, Mark Power, Renae Craig -Power and Moradi Matters Pty Ltd (ACN 153 570 300)

15. SHARE APPLICATION FORM

CORRECT FORMS OF REGISTRABLE TITLE

Type of Investor	Correct Form of Registration	Incorrect Form of Registration
Individual	Mr John Richard Sample	J R Sample
Joint Holdings	Mr John Richard Sample & Mrs Anne Sample	John Richard & Anne Sample
Company	ABC Pty Ltd	ABC P/L or ABC Co
Trusts	Mr John Richard Sample <Sample Family A/C>	John Sample Family Company
Superannuation Funds	Mr John Sample & Mrs Anne Sample <Sample Family Super A/C>	John & Anne Superannuation Fund
Partnerships	Mr John Sample & Mr Richard Sample <Sample & Son A/C>	John Sample & Son
Clubs/Unincorporated Bodies	Mr John Sample <Health Club A/C>	Health Club
Deceased Estates	Mr John Sample <Estate Late Anne Sample A/C>	Anne Sample (Deceased)

INSTRUCTIONS FOR COMPLETING THE FORM

YOU SHOULD READ THE PROSPECTUS CAREFULLY BEFORE COMPLETING THIS APPLICATION FORM.

This is an Application Form for fully paid ordinary Shares in Greentech Minerals Limited ACN 115 050 452 (**Company**) made under the terms set out in the Replacement Prospectus dated 28 October 2022 (**Prospectus**).

Capitalised terms not otherwise defined in this document has the meaning given to them in the Prospectus. The Prospectus contains important information relevant to your decision to invest and you should read the entire Prospectus before applying for Shares. If you are in doubt as to how to deal with this Application Form, please contact your accountant, lawyer, stockbroker or other professional adviser. To meet the requirements of the Corporations Act, this Application Form must not be distributed unless included in, or accompanied by, the Prospectus and any supplementary Prospectus (if applicable). While the Prospectus is current, the Company will send paper copies of the Prospectus, and any supplementary Prospectus (if applicable) and an Application Form, on request and without charge.

- Shares Applied For & Payment Amount** - Enter the number of Shares & the amount of the application monies payable you wish to apply for. Applications must be for a minimum of 10,000 Shares at \$0.20 per Share (i.e. for a minimum subscription amount of \$2,000). A larger number of Shares may be applied for in multiples of 2,500 Shares.
- Applicant Name(s) and Postal Address** - ONLY legal entities can hold Shares. The Application must be in the name of a natural person(s), companies or other legal entities acceptable by the Company. At least one full given name and surname is required for each natural person. Refer to the table above for the correct forms of registrable title(s). Applicants using the wrong form of names may be rejected. Next, enter your postal address for the registration of your holding and all correspondence. Only one address can be recorded against a holding.
- Contact Details** - Please provide your contact details for us to contact you between 9:00am and 5:00pm (AEDT) should we need to speak to you about your application. In providing your email address you elect to receive electronic communications. You can change your communication preferences at any time by logging in to the Investor Portal accessible at <https://investor.automic.com.au/#/home>
- CHES Holders** - If you are sponsored by a stockbroker or other participant and you wish to hold Shares allotted to you under this Application on the CHES subregister, enter your CHES HIN. Otherwise leave the section blank and on allotment you will be sponsored by the Company and a "Securityholder Reference Number" ("SRN") will be allocated to you.
- TFN/ABN/Exemption** - If you wish to have your Tax File Number, ABN or Exemption registered against your holding, please enter the details. Collection of TFN's is authorised by taxation laws but quotation is not compulsory and it will not affect your Application.
- Payment** - Applicants wishing to pay by BPAY® should complete the online Application, which can be accessed by following the web address provided on the front of the Application Form. Please ensure that payments are received by 5:00pm (AEDT) on the Closing Date. Do not forward cash with this Application Form as it will not be accepted.

EFT/TT - funds should be transferred to:
Beneficiary Name: Novus Capital Ltd
Beneficiary Bank: Australia & New Zealand Banking Group Limited
BSB: 013-013 **A/C:** 642 023 992
Swift Code: ANZBAU3M
Ref: GTM (followed by investor name)

Payments via cheque must be made payable to "Greentech Minerals Limited - IPO Account" and drawn on an Australian bank and expressed in Australian currency and crossed "Not Negotiable". Cheques or bank drafts drawn on overseas banks in Australian or any foreign currency will NOT be accepted. Any such cheques will be returned and the acceptance deemed to be invalid. Sufficient cleared funds should be held in your account as your acceptance may be rejected if your cheque is dishonoured. Completed Application Forms and accompanying cheques must be received before 5:00pm (AEDT) on the Closing Date by being delivered or mailed to the address set out in the instructions below.

DECLARATIONS

BY SUBMITTING THIS APPLICATION FORM WITH THE APPLICATION MONIES, I/WE DECLARE THAT I/WE:

- Have received a copy of the Prospectus, either in printed or electronic form and have read the Prospectus in full;
- Have completed this Application Form in accordance with the instructions on the form and in the Prospectus;
- Declare that the Application Form and all details and statements made by me/us are complete and accurate;
- I/we agree to provide further information or personal details, including information related to tax-related requirements, and acknowledge that processing of my application may be delayed, or my application may be rejected if such required information has not been provided;
- Agree and consent to the Company collecting, holding, using and disclosing my/our personal information in accordance with the Prospectus; and
- Where I/we have been provided information about another individual, warrant that I/we have obtained that individual's consent to the transfer of their information to the Company.
- Acknowledge that once the Company accepts my/our Application Form, I/we may not withdraw it;
- Apply for the number of Shares that I/we apply for (or a lower number allocated in a manner allowed under the Prospectus);
- Acknowledge that my/our Application may be rejected by the Company in its absolute discretion;
- Authorise the Company and their agents to do anything on my/our behalf necessary (including the completion and execution of documents) to enable the Shares to be allocated;
- Am/are over 18 years of age;
- Agree to be bound by the Constitution of the Company; and
- Acknowledge that neither the Company nor any person or entity guarantees any particular rate of return of the Shares, nor do they guarantee the repayment of capital.

LODGEMENT INSTRUCTIONS

The Offer opens on 31 October 2022 and is expected to close on 12 December 2022. The Directors reserve the right to close the Offer at any time once sufficient funds are received or to extend the Offer period. Applicants are encouraged to submit their applications as early as possible. Completed Application Forms and payments must be submitted as follows:

Paper Application and Cheque

By Post:
 Greentech Minerals Limited
 C/- Automic Pty Ltd
 GPO Box 5193
 SYDNEY NSW 2001

or
By Hand Delivery:
 Greentech Minerals Limited
 C/- Automic Pty Ltd
 Level 5, 126 Phillip Street
 SYDNEY NSW 2000

Online Applications and BPAY® or EFT Payments

Online:
<https://apply.automic.com.au/GreentechMinerals>

ASSISTANCE

Need help with your application, no problem. Please contact Automic on:



PHONE:
 1300 288 664 within Australia
 +61 (2) 9698 5414 from outside Australia



EMAIL:
corporate.actions@automicgroup.com.au



ANNEXURE A. INDEPENDENT GEOLOGIST REPORT



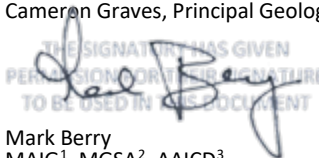
INDEPENDENT GEOLOGIST REPORT OF THE MAY DOWNS HIGH PURITY QUARTZ PROJECT MOUNT ISA, NORTHWEST QUEENSLAND

**Including an overview of the prospectivity for base metals,
specialty metals, and industrial minerals**

Client:	Greentech Minerals Limited
Project number:	P2122-22
Document status:	FINAL
Effective date:	31 July 2022
Document Date:	27 October 2022

Derisk Geomining Consultants Pty Ltd ABN 44 615 606 454
+61 4 0802 9549 +65 9084 4652 info@deriskgeomining.com www.deriskgeomining.com

DOCUMENT CONTROL AND INFORMATION

Project number:	P2122-22
Document title:	Independent Geologist Report of the May Downs HPQ Project, Qld
Client:	Greentech Minerals Limited
Client contact:	Mr Peter Crooks, Chief Executive Officer
Document file name:	P2122-22 Greentech May Downs IGR FINAL4.pdf
Document status:	Final Report
Effective date:	31 July 2022
Document date:	27 October 2022
Derisk project manager:	Mark Berry, Director – Principal Geologist
Derisk contributors:	Graham Rolfe, Associate Principal Geologist Michele Pilkington, Director – Business Manager
Derisk peer reviewer:	Cameron Graves, Principal Geologist
Authorised and signed on behalf of Derisk (for Final Documents):	 THE SIGNATURE HAS GIVEN PERMISSION FOR THIS SIGNATURE TO BE USED IN THE DOCUMENT
Derisk representative:	Mark Berry MAIG ¹ , MGSA ² , AAICD ³

This document has been commissioned by the Client and has been prepared by Derisk Geomining Consultants Pty Ltd (Derisk) for the exclusive use of the Client. The contents of this document may not be published, disclosed, or copied without the prior written consent of Derisk. The contents of this document may not be published, disclosed, or copied without the prior written consent of Derisk. The Client requested Derisk to prepare this document for inclusion in the Client's prospectus (Prospectus) to support an initial public offering of shares in the Client to enable a listing of the Client on the Australian Securities Exchange.

Derisk accepts no liability for the accuracy or completeness of information provided to it by the Client, however, Derisk has used reasonable endeavours to verify information provided by the Client that has contributed to the preparation of this document, including any conclusions and recommendations. The commentary, statements and opinions included in this document are provided in good faith and in the belief that they are not misleading or false. The terms of the agreement between the Client and Derisk are such that Derisk has no obligation to update this document for events after the date of this document.

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¹ Member, Australian Institute of Geoscientists
² Member, Geological Society of Australia
³ Affiliate, Australian Institute of Company Directors

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1 EXECUTIVE SUMMARY

1.1 Introduction

In November 2021, **Derisk** Geomining Consultants Pty Ltd (Derisk) was engaged by Greentech Minerals Limited (Greentech or the Company) to prepare an Independent Geologist Report (IGR or the Report) of the company's May Downs high purity quartz (HPQ) Project (May Downs, the Project, or the Tenements) in Mount Isa, northwest Queensland, to support an Initial Public Offering (IPO) on the Australian Securities Exchange (ASX). It also includes an overview of the prospectivity for base metals, specialty metals, and industrial minerals at May Downs. This Report will be included in the Company's Prospectus for the IPO.

1.2 Report Details

Derisk has adopted the VALMIN Code⁴ for the technical assessment of the Project, and the JORC Code⁵ as the public reporting standard. The effective date of this Report is 31 July 2022. All values in this report are in Australian dollars (AUD or \$) unless otherwise stated.

This Report has been prepared by Graham Rolfe and Mark Berry and peer reviewed by Cameron Graves. Graham Rolfe is the Practitioner and Specialist (as defined by the VALMIN Code) for the IGR and was assisted by Mark Berry, who is also a Specialist. A site visit to the Project was undertaken by Graham Rolfe in December 2021.

Greentech has appointed Mark Biggs, Managing Director of ROM Resources Pty Ltd (ROM) as the Competent Person (as defined by the JORC Code) for compilation of the Exploration Results, Exploration Targets, and Mineral Resources reported in the Company's Prospectus.

Derisk confirms that its Directors, staff, contributors, and reviewers to this Report are independent of Greentech and ROM, and have no interest in the outcome of the work to be completed in this engagement. Fees paid to Derisk are on a fee-for-service basis plus reimbursement of project-related expenses. Our agreement with Greentech excludes any provision for a success fee or related incentive.

1.3 Project Location and Ownership

Greentech and its 100% owned subsidiary Millungera Energy Minerals Pty Ltd (MEM) hold five tenements comprising one Mining Lease (ML 100124) and four Exploration Permits for Minerals (EPM 19373, EPM 25894, EPM 26051, and EPM 27457) with a total area of 651 km², centred approximately 25 km west-northwest of Mount Isa in northwest Qld. The Tenements are prospective for quartz mineralisation amenable to the production of HPQ and other minerals including base metals, specialty metals such as vanadium, titanium, rare earth elements (REE), and phosphate.

Both EPM 19373 and EPM 25894 were originally granted to parties other than Greentech. EPM 19373 was transferred to Greentech in September 2017 as part of a joint venture agreement with Nova Strategic Minerals Pty Ltd (Nova). In October 2016, Greentech acquired 100% of MEM. EPM 26051, EPM 27457, and ML 100124 were granted directly to Greentech. ML 100124 is granted for the purpose of quartz/quartzite/silica and each of the four EPMS are granted for exploration of all minerals other than coal.

In January 2018, MEM entered into a Farm-In Agreement with Multimines Pty Ltd (Multimines) in which Multimines could earn a 20% interest in EPM 25894 for all minerals other than quartz (and coal) through a minimum expenditure of AUD 65,000 and a maximum expenditure of AUD 100,000 within six months of the start of the agreement. Greentech advised Derisk that Multimines met this expenditure requirement and now holds a 20% interest in EPM 25894 for minerals other than quartz. Future exploration for minerals other than quartz on EPM 25894 will be funded pro rata by each party.

1.4 History

The Tenements now held by Greentech have been subject to previous Intermittent exploration since 1954, when uranium was first discovered to the east of the Project. Several airborne magnetic and radiometric surveys have covered various parts of the Project and historical exploration has consisted of minor shallow drilling, surface geochemistry, and various geophysical surveys. More recently, prospecting activity has been directed towards copper, gold, and REE mineralisation. Several prospects near the existing Tenements have been historically worked for uranium, mica, tin, beryllium, and silica.

⁴ Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets (The VALMIN Code), 2015

⁵ Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code), 2012

No previous exploration was undertaken for HPQ deposits over the existing Tenements, although some quarrying of quartz was undertaken at the Guns Knob prospect on EPM 25894 for road base construction.

Greentech and previous holders of the Tenements have completed a number of exploration and evaluation programs for HPQ since 2012, when EPM 19373 was granted. In addition, Multimines funded a program of base metal exploration on EPM 25894 in 2018 to earn its farm-in interest. Most HPQ-related work has been completed on EPM 19373 and EPM 25894 and included prospectivity analysis, geological mapping and aerial drone surveys, surface geochemistry, drilling, bulk sampling, testing and trial processing, and estimation of an Exploration Target and Mineral Resource.

1.5 Exploration Target, Mineral Resource and Ore Reserve

The Company has identified over 80 individual quartz veins on the Project and exploration to date has resulted in the estimation and reporting of a Mineral Resource for 11 quartz veins. Table 1-1 summarises the HPQ Mineral Resource identified to date, which totals 388 kt comprising 72 kt of Measured Resource, 161 kt of Indicated Resource, and 155 kt of Inferred Resource. No Ore Reserve has been estimated to date.

Table 1-1. May Downs HPQ Mineral Resource reported at an effective date of 31 July 2022.

Prospect	Tenement	Measured (kt)	Indicated (kt)	Inferred (kt)	Total (kt)	SiO ₂ (%)
Reef 1	ML 100124	5	1	3	10	99.93
Reef 1A	ML 100124	-	<1	<1	1	99.96
Reef 2	ML 100124	9	4	5	19	99.96
Reef 3	EPM 25894	20	19	12	51	99.95
Reef 3A	EPM 25894	-	7	5	12	99.95
Reef 4	EPM 25894	-	3	2	4	99.96
Reef 6	EPM 25894	-	<1	<1	1	99.96
Guns Knob	EPM 25894	38	78	6	121	99.96
Reef_WT	EPM 25894	-	<1	2	2	99.96
Reef_WT_N1	EPM 25894	-	12	30	42	99.96
Reef_WT_N2	EPM 25894	-	36	89	124	99.96
TOTAL		72	161	155	388	99.96

Note: 1. Competent Person for estimation and reporting – Mark Biggs (ROM).
2. Derisk has rounded resource sub-totals to reflect the accuracy of estimates and this may lead to rounding errors.
3. No cut-off criterion for SiO₂ content was applied.
4. Calculated SiO₂ contents ignore the determination of LOI, which typically ranges from 0.04% to 0.08%

The Company has also estimated an Exploration Target based on actual exploration completed to date for an additional 69 quartz veins as at 31 July 2022, as summarised in Table 1-2. Derisk notes that the potential quantity and grade of this material is conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Table 1-2. May Downs HPQ Exploration Target reported at an effective date of 31 July 2022.

Number of Reefs	Tonnes – Low (kt)	Tonnes – High (kt)	SiO ₂ – Low (%)	SiO ₂ – High (%)
69	160	540	99.0	99.9

Note: 1. Competent Person for estimation and reporting – Mark Biggs (ROM).
2. Cut-off criterion of 99.0% SiO₂ applied.

1.6 Strategy and Proposed Work Program

Greentech is primarily focused on the extraction and processing of HPQ from May Downs to supply the growing solar panel, semiconductor, optic-fibre, and microelectronic industries. The Company has completed preliminary processing testwork that suggests quartz vein material can be upgraded to meet the specifications required for some HPQ applications. However, Greentech recognises the importance of undertaking detailed testwork to demonstrate that quartz from May Downs can be beneficiated to HPQ products and has sent a 150 kg sample of quartz for characterisation and processing testwork to Dorfner Analysenzentrum und Anlagenplanungsgesellschaft mbH (ANZAPLAN) that will be completed in the second half of 2022.

Post-IPO, Greentech has proposed a two-year work program comprised of exploration, testwork, and feasibility studies focused on proving up the technical and economic viability of a small HPQ operation. Greentech aspires to commence production and sales of HPQ feedstock as soon as possible. Greentech also plans to evaluate the potential for discovery of other minerals on the Tenements.

The main components of the two-year work program include:

- Resource to Reserve conversion sufficient for 5 years production.
- Completion of bench-scale processing and beneficiation trials by ANZAPLAN to optimise product quality and price for quartz from the Project.
- Commencement of mining, crushing, sorting and stockpiling.
- Marketing and offtake negotiations.
- Design and construction of an on-site, front-end pilot processing plant to produce Grade I HPQ.

Greentech plans to raise from AUD 5.0 – 7.0 M as part of the IPO. This translates into a direct exploration and operational expenditure ranging from AUD 3.30 – 5.17 M respectively. The majority of the proposed expenditure is focused on further exploration, testwork and feasibility, mining, and construction of a pilot processing plant to upgrade raw quartz feedstock into a saleable HPQ product for export.

1.7 Risks and Opportunities

Derisk considers the key risks for Greentech are:

- **Technical risk:** Greentech may be unsuccessful in its aim of establishing a viable process to upgrade raw quartz feedstock into a marketable HPQ product for export.
- **Economic risk:** Greentech may be unsuccessful in establishing a financially viable mining and processing operation to supply a marketable HPQ product for export.
- **Tenure risk:** Greentech holds exploration tenements and a mining lease that must be maintained. The Company will need to maintain its tenements in good standing and meet expenditure and other commitments to be sure of retaining tenure.

Greentech will need to apply for additional MLs to sustain future production of HPQ, as most of the existing Mineral Resource and Exploration Target are not located on ML 100124. New ML applications may have a substantial lead time and Greentech will need to manage applications for new MLs efficiently to avoid delays.

- **Funding risk:** Greentech will need to raise further funds to finance expansion of HPQ operations beyond the next two years.

The key opportunity for Greentech is the establishment of a long-term profitable vertically integrated HPQ mining and processing operation based on its quartz feedstock at Mt Isa. The other main opportunity is the discovery of a new deposit containing minerals other than silica/HPQ.

1.8 Conclusions

Greentech holds tenements comprising one granted ML and four granted EPMs near Mt Isa in northwest Qld, with a total area of 651 km². The Tenements host many occurrences of outcropping quartz veins and Greentech has identified and estimated a HPQ Mineral Resource at 11 prospects and has estimated an Exploration Target over an additional 69 prospects. Work has also identified further quartz veins across the Tenements that have yet to be investigated in detail and the Tenements are prospective for minerals other than quartz.

Preliminary testing and processing trials undertaken by several Chinese firms suggest that quartz mined from May Downs can be beneficiated into marketable HPQ products. Upon listing, Greentech has proposed a two-year work program comprised of exploration, testwork, and feasibility studies focused on proving up the technical and economic viability of a HPQ operation, prior to commencement of mining and pilot plant on-site processing.

Derisk considers that Greentech has identified adequate Mineral Resources to support the first five years of a small – modest quartz mining and HPQ processing operation at Mt Isa.

Some testwork and processing trials have been completed that suggest the May Downs quartz deposits can be beneficiated into a marketable HPQ product. However, Derisk considers that sufficient testwork and processing trials have not been completed to date and this will be a major focus for the Company immediately prior to and upon listing. This work to be completed by ANZAPLAN will be crucial in driving the technical studies required to estimate Ore Reserves and establish a technically viable process route to create a

marketable HPQ product that will be financially viable. Greentech plans to complete this work before the end of year one, then progress to construction of a small processing plant to produce entry-level HPQ sand product. In parallel, Greentech intends to continue exploration of its HPQ targets and assess opportunities to explore for other minerals.

Greentech plans to raise from AUD 5.0 – 7.0 M as part of the IPO. This translates into a direct exploration and operational expenditure ranging from AUD 3.30 – 5.17 M respectively. Derisk believes that the goals set by Greentech are achievable within this budget framework but will be challenging and there is potential for slippage in the schedule due to delays and/or technical complexities. The key risks are potential delays and/or complications associated with the proposed HPQ testwork required to support plant design, and potential delays and/or additional costs incurred in construction of the pilot scale processing plant.

2 INTRODUCTION

2.1 Scope and Use of Report

In November 2021, Derisk was engaged by Greentech to prepare an IGR of the company's May Downs HPQ project in Mount Isa, northwest Queensland, to support an IPO on the ASX. It also includes an overview of the prospectivity for base metals, specialty metals, and industrial minerals at May Downs. This Report will be included in the Company's Prospectus for the IPO.

2.2 Technical Assessment, Reporting Standard and Currency

For this report, Derisk has adopted the VALMIN Code for the technical assessment of the Project, and the JORC Code as the public reporting standard.

The effective date of this report is 31 July 2022. All values in this report are in AUD unless otherwise stated.

2.3 Report Authors and Contributors

This report has been prepared by Graham Rolfe and Mark Berry, and has been peer reviewed by Cameron Graves. Table 2-1 presents details of the role and qualifications of each of the contributors.

Table 2-1. Report contributors.

Name	Title	Years of Experience	Professional Membership	Role and Responsibility
Mark Berry	Director and Principal Geologist	40	MAIG	Project Manager and Specialist
Graham Rolfe	Associate Principal Geologist	45	FAIG	Practitioner and Specialist
Cameron Graves	Principal Geologist	30	MAIG	Internal peer review

Refer to Section 15 Definitions and Glossary for explanation of professional memberships.

The VALMIN Code requires that a public report on a technical assessment and valuation for mineral assets or securities must be prepared by a Practitioner, who is an Expert as defined in the Australian Corporations Act 2001 (Cth). Practitioners may be Specialists and Securities Experts (as defined in the VALMIN Code).

The JORC Code requires that a public report describing a company's Exploration Results, Mineral Resources and Ore Reserves must be based on, and fairly reflect, the information and supporting documentation prepared by a Competent Person, as defined by the JORC Code.

Graham Rolfe is the Practitioner and Specialist for the IGR and was assisted by Mark Berry, who is also a Specialist. A Practitioner statement and consent for Graham Rolfe and a Specialist statement and consent for Mark Berry are provided in Section 13 of this Report.

Greentech has appointed Mark Biggs (Managing Director, ROM) as the Competent Person (as defined by the JORC Code) for compilation of the Exploration Results, Exploration Targets, and Mineral Resources reported in the Company's Prospectus and reviewed in this Report.

2.4 Site Visit

A site visit to the Project was undertaken by Graham Rolfe on 1 December 2021.

2.5 Statement of Independence

Derisk confirms that its Directors, staff, and all contributors to this Report are independent of Greentech and ROM, and have no interest in the outcome of the work to be completed in this engagement. Fees paid to Derisk are on a fee-for-service basis plus reimbursement of project-related expenses if applicable. Our agreement with Greentech excludes the provision for a success fee or related incentive. The fee for preparation of this Report is AUD 33,700 and payment of this fee is in no way contingent on the results of this Report.

2.6 Methodology and Limitations

Derisk has independently analysed the data provided by Greentech. The accuracy of the conclusions of this IGR relies on the accuracy of the supplied data. Derisk Specialists have made reasonable enquiries and exercised our judgement on the reasonable use of such data and information and have no cause to doubt the accuracy or reliability of the information provided, but we do not accept responsibility for any errors or omissions in the information supplied, and do not accept any consequential liability arising from investment or other financial decisions or actions by others.

Derisk has not independently verified the legal status of the tenements described in this Report but has relied on information provided by Greentech regarding the legal status of the tenements. The due diligence review of the status of the tenements has been undertaken by the independent firm, Hetherington Exploration & Mining Title Services (QLD) Pty Ltd (Hetherington), and as such, Hetherington assumes no responsibility for any part of this Report.

2.7 Reliance

Derisk understands that this Report will form part of the Prospectus and will be made publicly available. Derisk requires that all public reports containing references to Derisk and/or Derisk advice, and all information provided by Derisk for the public report will be reviewed and approved by Derisk prior to publication – in the form and context that it will appear in the public report.

2.8 Consents

This document contains statements attributable to third parties that are made, or based upon statements made, in previous technical reports that are publicly available from either Australian government sources or ASX, but those reports are not incorporated by reference into the Prospectus. The authors of these reports have not consented to their statements being used in this document, and these statements are included in accordance with ASIC Corporations (Consent and Statements) Instrument 2016/72.

2.9 Records and Indemnities

Greentech has been provided with all digital data files produced by Derisk during this engagement. Derisk is entitled to retain a copy of all material information upon which our report is based.

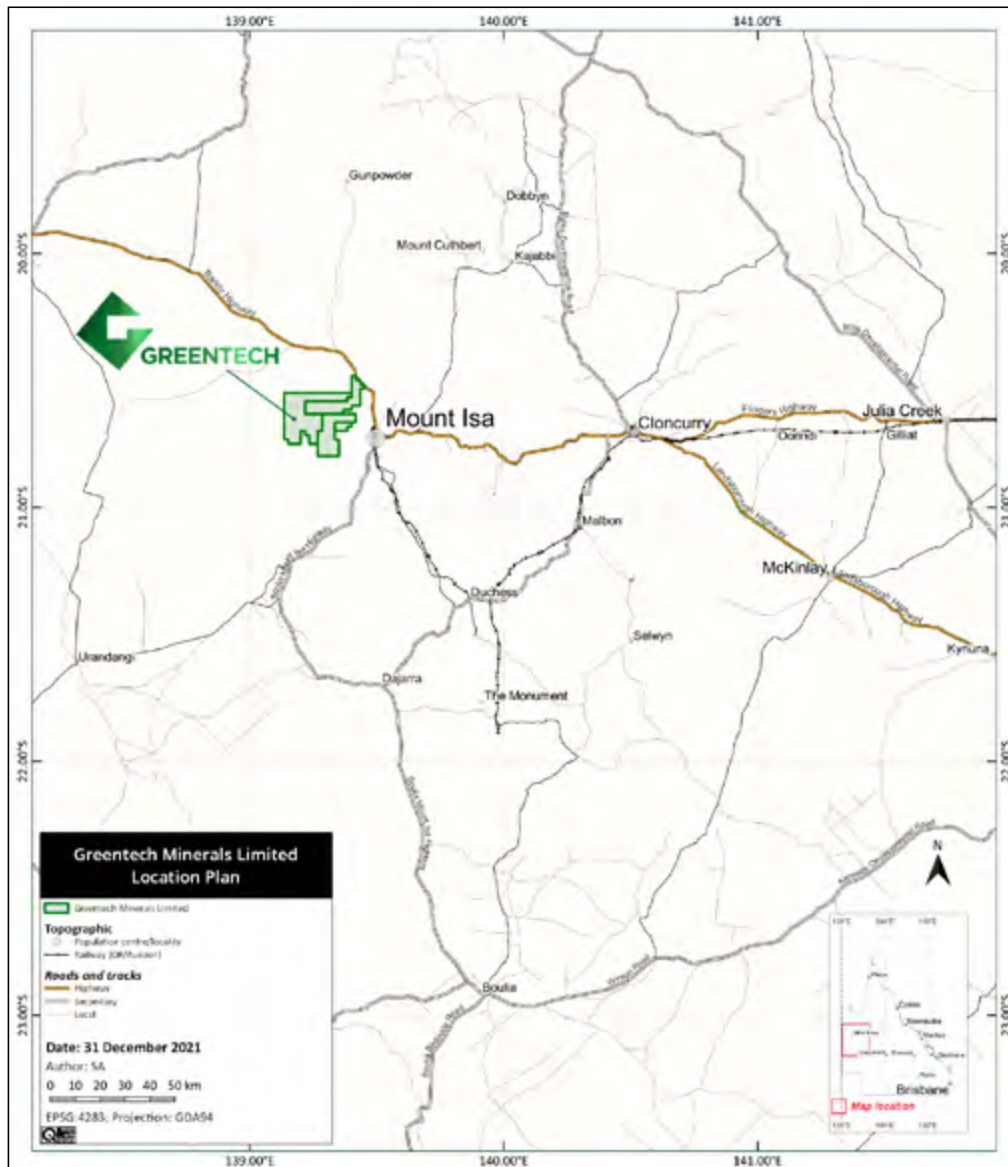
Greentech has agreed to indemnify, defend, and hold Derisk harmless against any and all losses, claims, damages, costs, expenses, actions, demands, liabilities, or proceedings (including but not limited to third-party claims) howsoever arising, whether directly or indirectly out of this Agreement or the provision or non-provision of the services, other than losses, claims, damages, costs, expenses, actions, demands, liabilities, or proceedings that are determined by a final judgement of a court of competent jurisdiction to have resulted from actions taken or omitted to be taken by Derisk illegally or in bad faith or as a result of Derisk's gross negligence.

3 PROJECT SUMMARY

3.1 Ownership and Location

Greentech and its 100% owned subsidiary MEM holds five tenements (one ML and four EPMs) with a total area of 651 km², centred approximately 25 km west-northwest of Mount Isa in northwest Qld (Figure 3-1).

Figure 3-1. Location of May Downs project area.



Prepared by Derisk, 2021.

The ownership history of the five tenements is as follows:

- EPM 19373 (originally 11 sub-blocks) was granted to Mark Mining and Resources Pty Ltd for a five-year term in December 2012. In January 2016 the tenement was acquired by Nova, and in September 2017 it was transferred to Yilgarn Infrastructure Limited. It was renewed in December 2017 for a three-year term and four sub-blocks were relinquished. In September 2019 the tenement holder was changed to Yilgarn Minerals Limited and renewed in December 2020 for a further five years. In September 2021 the holder was changed to Greentech. A further 3 sub-blocks are due to be relinquished by December 2025.
- EPM 25894 (originally 85 sub-blocks) was first granted to MEM for a five-year term in October 2015. In 2019, 35 sub-blocks were relinquished. It was renewed in 2020 and a further 25 sub-blocks are due to be relinquished by September 2025.
- EPM 26051 (originally 46 sub-blocks) was first granted to Yilgarn Infrastructure Limited for a five-year term in May 2017. In September 2019 the tenement holder was changed to Yilgarn Minerals Limited, and in September 2021 was changed again to Greentech. It is due for renewal prior to April 2022 without any relinquishment, but 50% is due to be relinquished by April 2027.
- ML 100124 (26.28 ha) was granted to MEM for a five-year term in August 2019. The ML sits wholly within EPM 25894.
- EPM 27457 (originally 100 sub-blocks) was first granted to Yilgarn Minerals Limited for a five-year term in September 2020, and in September 2021 the holder was changed to Greentech. It is due for renewal prior to August 2025 with 50% to be relinquished at that time.

Corporately, in October 2016, Yilgarn Infrastructure Limited acquired 100% of MEM. In November 2018, Yilgarn Infrastructure Limited was renamed to Yilgarn Minerals Limited. In August 2021, Yilgarn Minerals Limited was renamed to Greentech.

In January 2018, MEM entered into a Farm-In Agreement with Multimines in which Multimines could earn a 20% interest in EPM 25894 for all minerals other than quartz through the minimum expenditure of AUD 65,000 and a maximum expenditure of AUD 100,000 within six months of the start of the agreement. Greentech advised Derisk that Multimines met the expenditure requirements and now holds a 20% interest in EPM 25894 for minerals other than quartz. Future exploration for minerals other than quartz on EPM 25894 will be funded pro rata by each party.

3.2 Project Status

Greentech is focused on the extraction and processing of HPQ from May Downs to supply the growing solar panel, semiconductor, optic-fibre, and microelectronic industries. The Company has identified over 80 individual quartz veins on the Project and exploration to date has resulted in the estimation and reporting of a Mineral Resource for 11 quartz veins and an Exploration Target for an additional 69 quartz veins as at January 2022.

The Company has completed preliminary processing testwork that suggests the quartz vein material can be upgraded to meet the specifications required for some HPQ applications.

Greentech plans to use funds from the IPO to undertake further processing testwork, develop a modest mining operation and construct a processing plant to upgrade the quartz veins at May Downs to a HPQ product for export. In the longer term, Greentech plans to develop a vertically-integrated HPQ supply chain. Greentech also proposes to evaluate the potential to find other minerals on the Project.

3.3 Access and Infrastructure

The Project is located approximately 25 km west-northwest of Mount Isa in northwest Qld. Mount Isa is the main administrative, commercial, and industrial centre for the state's northwestern region. It is serviced by a domestic airport, a rail link to Townsville on the Qld coast, and sealed highways that connect the town to Townsville, Brisbane, Darwin, and Adelaide. Access from Mount Isa to the Project is via public sealed roads, then by a network of unsealed tracks.

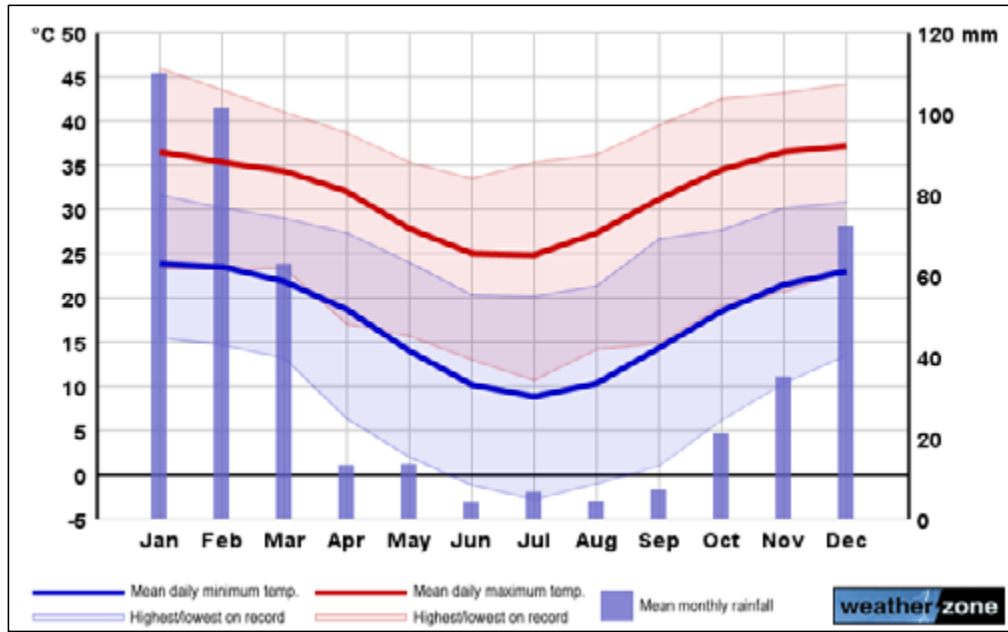
3.4 Climate

The climate of Mount Isa is tropical continental and consists of three main seasons:

- Mild temperatures with low humidity (May to August).
- Hot temperatures with low humidity (September to December).
- Hot temperatures with high humidity (January to April).

Figure 3-2 presents monthly temperature and rainfall statistics for Mount Isa. Mean daily temperatures range from 25°C to over 35°C and mean monthly rainfall varies from less than 5 mm to over 100 mm in January and February.

Figure 3-2. Mount Isa average monthly temperature and rainfall statistics.



Source: Farmonline website, <https://www.farmonlineweather.com.au/climate/station.jsp?lt=site&lc=29127>

3.5 Geomorphology

The Project area comprises mostly flat-lying gently undulating topography with clay soils and light vegetation. Some granite and quartz veins outcrop (Figure 3-3).

Figure 3-3. Example of surface topography and landforms (outcropping quartz vein in the centre of the photo).



Source: Greentech website, <https://greentechminerals.com.au/our-resource/tenements/>

4 TENEMENT STATUS

In August 2022, an independent tenement review was completed by Hetherington to fulfil VALMIN Code requirements for a recent independent assessment of tenement status. The purpose of the Hetherington review was to determine and identify:

- The interests held by the Company in the tenements.
- Any third-party interests, including encumbrances, in relation to the tenements.
- Any material issues existing in respect of the tenements.
- The good standing, or otherwise, of the tenements.
- Any concurrent interests in the land the subject of the tenements, including other mining tenements, private land, pastoral leases, Native Title and Aboriginal heritage.

4.1 Tenure

Tenement details for the portfolio are summarised in Table 4-1 and shown in Figure 4-1. The tenements are held in the name of two companies i.e., Greentech and MEM, which is a 100% owned subsidiary of Greentech.

All EPMs have been granted for all minerals other than coal. The ML has been granted specifically for quartz/quartzite/silica.

Table 4-1. Tenement status.

Tenement	Name	Holder	Grant Date	Expiry Date	Size (sub-blocks)	Size (km ²)
ML 100124	-	Millungera Energy Minerals Pty Ltd	13-08-2019	31-08-2024	N/A	0.26
EPM 19373	Mark 2	Greentech Minerals Limited	13-12-2012	12-12-2025	7	22.43
EPM 25894	May Downs	Millungera Energy Minerals Pty Ltd	15-10-2015	14-10-2025	50	160.17
EPM 26051	Georgina	Greentech Minerals Limited	22-05-2017	21-05-2027	46	147.47
EPM 27457	Kingsley	Greentech Minerals Limited	28-09-2020	27-09-2025	100	320.52
Total Size						650.59

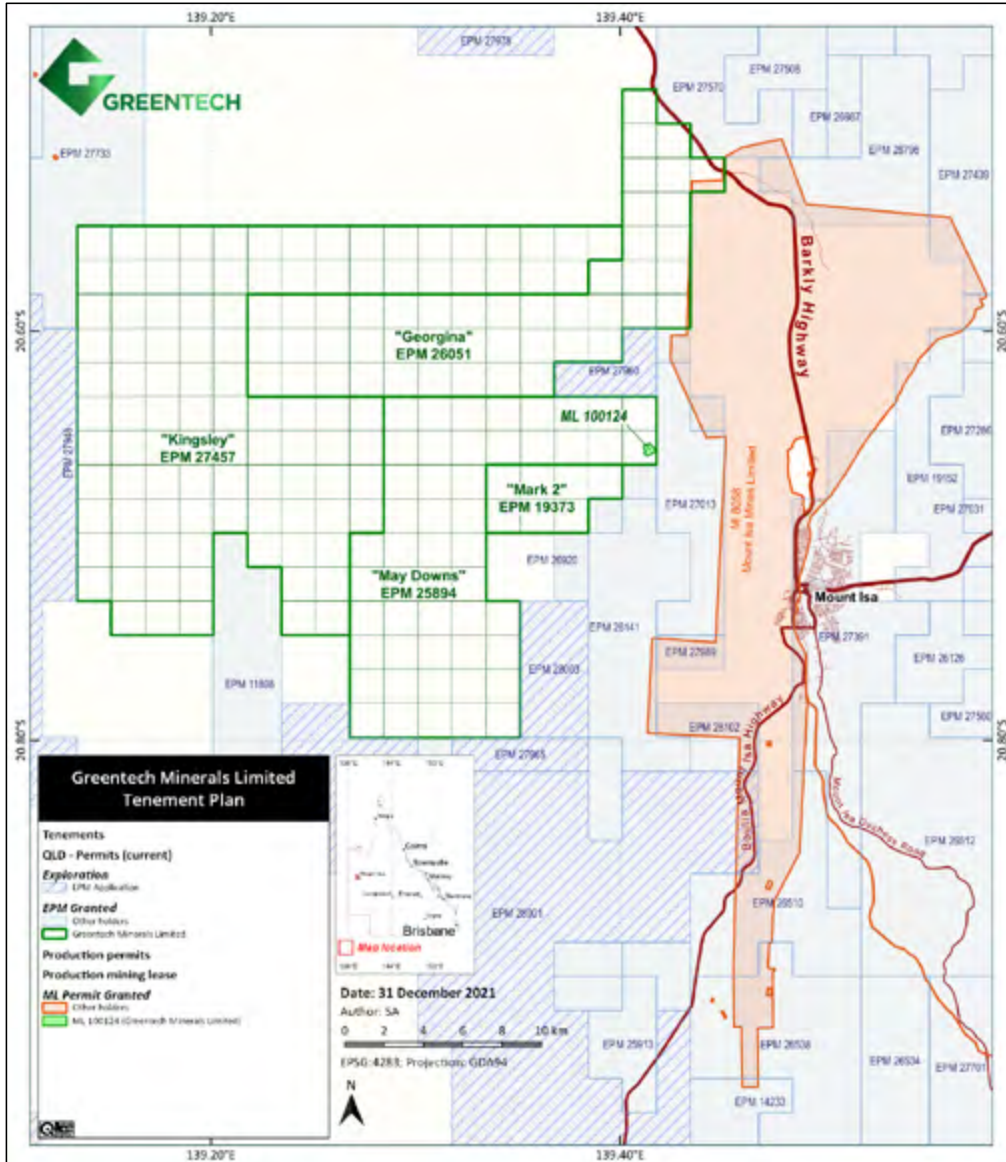
Prepared by Derisk based on information compiled by Hetherington, 2021.

4.2 Tenement Standing

Hetherington determined that:

- The tenements have been validly granted under the Mineral Resources Act 1989 (Qld).
- The searches indicated that the tenements are held by the Company directly, or through a wholly-owned subsidiary of the Company.
- The searches indicated that the tenements are in good standing and there are no outstanding rental, expenditure or reporting requirements.
- The searches indicated the tenements are not subject to any registered encumbrances, except for EPM 25894. Greentech holds a consent caveat to stop the registration of any mortgage or transfer of an interest in EPM 25894, unless Greentech provides written consent to the relevant dealing.
- Most of the tenements are granted over Native Title lands and Hetherington has summarised the conditions associated with Native Title.
- All tenements are subject to Environmental Authorities, which have been detailed by Hetherington.
- Some tenements are subject to Exclusions or Restrictions, which have been detailed by Hetherington. Of note:
 - Restricted Area 252 (Slaughter Yard Creek gem site) is excluded from the area granted within EPM 25894, representing 3% of the tenement area.
 - Restricted Area 253 (May Downs fossil site) is excluded from the area granted within EPM 26051, representing 3% of the tenement area.
 - EPMs 25894, 26051, and 27457 contain small proportions of Endangered Regional Ecosystem areas. Certain exploration activities within and adjacent to these areas are restricted unless a relaxation of requirements is granted by the Queensland Department of Environment and Science.

Figure 4-1. May Downs tenements location.



Prepared by Derisk, 2021.

5 HPQ MARKET OVERVIEW

Silica is one of the most abundant compounds in the earth’s crust as quartz and sand. Silica has many uses depending on its degree of purity. Grades below 99% SiO₂ are used as construction sand depending on the grain size distribution and the grain shape. Grades up to 99.5% SiO₂ are used in the manufacture of glass, optical fibres and ceramics.

HPQ contains a minimum of 99.99% SiO₂ and is a vital industrial component required in the production of all high-end electronics applications, semi-conductors, photovoltaic solar panels, and optic-fibre markets (Table 5-1). Demand is growing as global consumption grows. Indicative pricing is presented in Table 5-2.

Table 5-1. HPQ specifications, description, and applications.

HPQ Sand	<p>□ HPQ sand is the high purity quartz silica with 99.99% of purity. Availability of HPQ sand is relatively less. This sand is used in high purity fillers, ceramics, specialty glass, and molding compounds. On further purification, HPQ sand with more than 99.99% of purity can be obtained. This sand is further classified into various grades.</p>
Grade I	<p>□ Grade I HPQ includes high purity quartz having SiO₂ concentration >99.99% but <99.995%. HPQ considered in the scope of Grade I is equivalent to the IOTA standard. Some of the common applications of Grade I HPQ include halogen and mercury lamps, optical glass, and custom production applications such as fused quartz tubing and ingots.</p>
Grade II	<p>□ Grade II HPQ includes high purity quartz having SiO₂ concentration >99.995% but <99.998%. HPQ considered in the scope of Grade II is equivalent to IOTA 4 and 5 standards. Some of the common applications of Grade II HPQ are monocrystalline crucibles for solar applications, high-quality fused glass, tubing, and quartz-ware.</p>
Grade III	<p>□ Grade III HPQ includes high purity quartz having SiO₂ concentration >99.999%. HPQ considered in the scope of Grade III is equivalent to the IOTA 8 standard. Some of the common applications of Grade III HPQ are semiconductor grade crucibles and high-end solar and semiconductor applications.</p>

Source: Transparency Market Research, 2020.

Table 5-2. HPQ specifications and indicative pricing.

Grade	SiO ₂ Grade (%)	Impurity Content (%)	Impurity Content (ppm)	Indicative Price (USD/t)
HPQ sand	99.99	>0.05	>500	1,000 – 1,500
HPQ – Grade I	99.99 – 99.995	0.03 – 0.05	300 – 500	3,500 – 5,500
HPQ – Grade II	99.995 – 99.998	0.0002 – 0.005	20 – 50	7,500 – 11,500
HPQ – Grade III	>99.999	0.0001 – 0.0004	1 – 4	12,500 – 19,000

Source: Stratum Resources, 2021.

HPQ is very rare in nature. Most quartz contains a range of impurities from substantial elements such as aluminium, titanium, iron, calcium, sodium, and lithium, which are either difficult or impossible to remove if structurally bound to the silica. The processing required to produce HPQ depends on the amount and type of impurities present and may include crushing, screening, flotation, acid washes, magnetic separation, and/or other physical, chemical, and thermal techniques.

Quartz within veins, reefs or pipes, silica sand, high quartz alaskite, and quartzite with high silica contents are used as the raw product to produce HPQ. Massive quartz is easy to process after crushing and screening to produce a high purity product. The contaminants associated with silica sand are harder to reduce compared to hard rock quartz, which tend to be more homogeneous.

The world production of HPQ is dominated by a duopoly of Sibelco and Quartz Corporation producing from the same resource at Spruce Pine in USA. The raw product at Spruce Pine is an alaskite deposit – quartz rich granitoid. Much of the Chinese production of HPQ uses imported quartz from Spruce Pine. Some HPQ production in Norway is sourced from a kyanite quartzite.

In Australia, HPQ sand is produced from silica sand at Cape Flattery in Queensland by the Japanese company Mitsubishi and production is planned from adjacent projects controlled by Diatrema Ltd and Metallica

Minerals Ltd. In the Perth Basin of Western Australia, beach sand is mined and projects are being developed by various companies such as VRX Silica Ltd. Silica sand is commonly used in the lower quality glass manufacture. A new project is being developed at Sugarbag Hill in the Georgetown district of Queensland by High Purity Quartz Ltd based on a hard rock quartz reef within a granitoid.

Greentech is planning to produce low-end entry-level HPQ sand product and progressively upgrade to a HPQ Grade I product, then later to a HPQ Grade II product by building a plant in Queensland. This will be done in stages, starting with a small plant and scaling up and installing new processing equipment as market share is gained.

In November 2017, Greentech negotiated a long term off-take agreement to supply Jiangsu YangShan Silicon Material Technology Co. Ltd (Jiangsu) with quartz containing greater than 99.9% SiO₂. The Agreement specifies maximum concentrations of the trace elements aluminium, calcium, copper, iron, potassium, lithium, sodium, boron, and phosphorus. Jiangsu processes quartz ore to produce HPQ products such as solar crucibles, optic fibre, semiconductor epoxy moulding compound (EMC), and other quartz products. Greentech has advised Derisk that this agreement remains in place at the effective date of this report.

6 GEOLOGICAL SETTING

6.1 Regional Geology

Mount Isa Province covers an area in excess of 50 000 km² in northwest Queensland, roughly centred on the township of Mount Isa. The rocks can be divided into three sub-provinces of differing character and history (Withnall and Cranfield, 2013). Early Paleoproterozoic basement rocks form the Kalkadoon–Leichhardt Sub-province, a meridional belt dividing two younger domains of late Paleoproterozoic age i.e., the Eastern Fold Belt Sub-province and the Western Fold Belt Sub-province, each comprised mostly of metasedimentary lithologies.

Granites and mafic intrusions were emplaced at various times before approximately 1,100 Ma. Granites older than 1,550 Ma are metamorphosed and generally deformed. From west to east the main batholiths exposed are the Sybella (1,670 Ma) in the Western Fold Belt Province, the Kalkadoon and Ewen (1,870 – 1,850 Ma) in the Kalkadoon–Leichhardt Sub-Province, and the Wonga (1,750 – 1,725 Ma) and post-orogenic Williams and Naraku Batholiths in the Eastern Fold Belt Sub-province. Intrusives of the Williams and Naraku Batholiths have been shown to be of at least three different ages (1,750 – 1,730 Ma, 1,545 – 1,530 Ma and 1,520 – 1,490 Ma).

The Mount Isa Province has had a complex history of deformation, which has been dominated at different periods by extension, shortening and transcurrent faulting.

Rocks of the Mount Isa Province have been overprinted by regional metasomatism. The inlier is host to globally significant base metal deposits. Stratiform lead-zinc-silver deposits are considered to be syngenetic/diagenetic in origin, whereas the origin of stratabound copper and iron oxide copper–gold deposits are thought to involve deep crustal fluids, in some cases linked to plutonism.

6.2 Local Geology

The Project is centred on the Sybella Province of the Western Fold Belt Sub-province, immediately west of Mt Isa (Figure 6-1). The Sybella Province consists of the Haslingden Group (Derrick et al, 1976a and 1976b), an arenite sequence with interbedded basalt and very minor acid volcanics. From the top to the base, the Haslingden Group consists of:

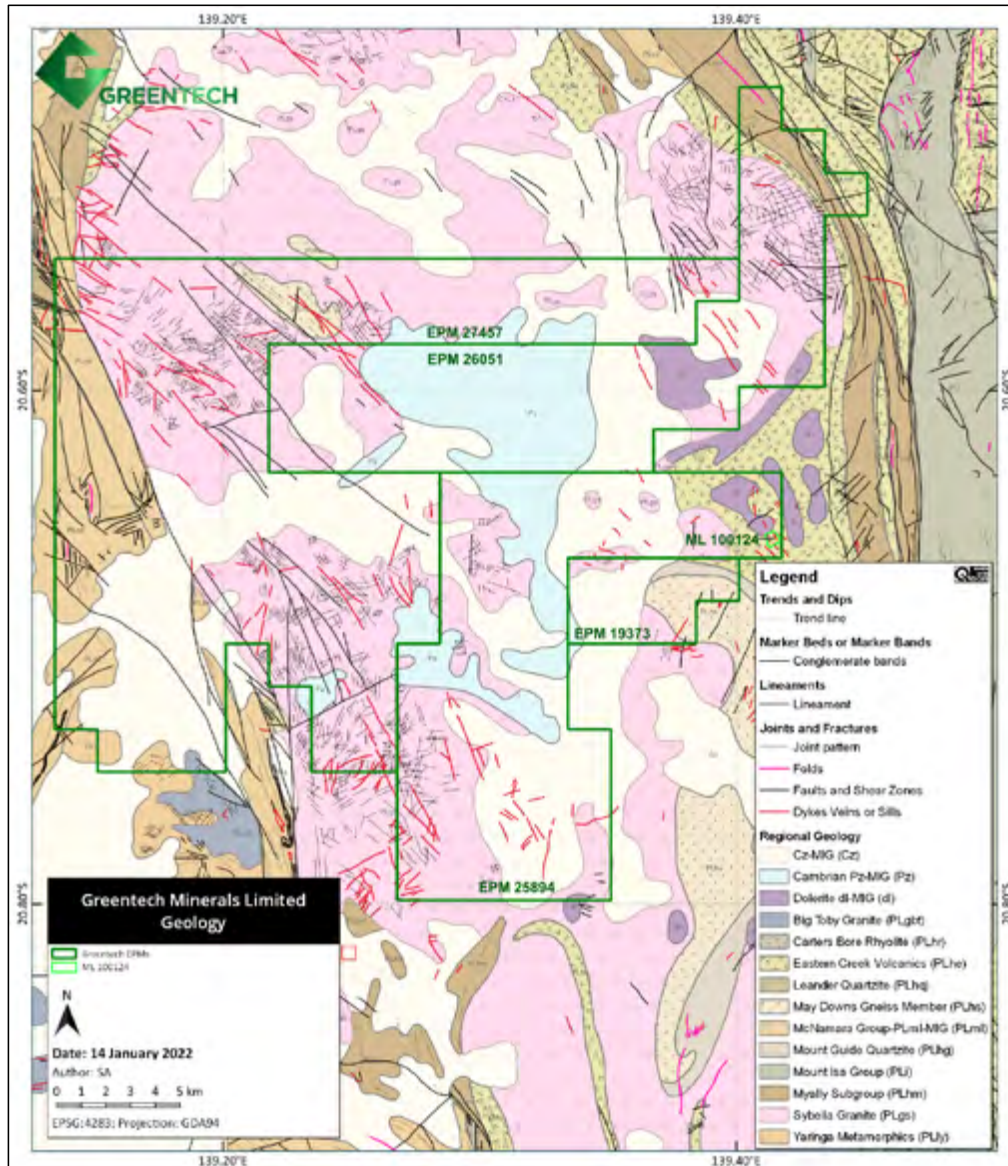
- Myally Sub-Group consisting of:
 - Lochness Formation.
 - Police Creek Siltstone Member.
 - Whitworth Quartzite.
 - Bortala Formation.
 - Alsace Quartzite.
- Eastern Creek Volcanics, locally called the Alpha Centauri Metamorphics.
- Mt Guide Quartzite.
- May Downs Gneiss.
- Leander Quartzite.

The Haslingden Group forms a north trending belt 300 km long and 50 km wide centred on Mt Isa. It unconformably overlies the Leichhardt Metamorphics with intrusive Kalkadoon and Ewan Granites. The Group also overlies the Argylla Formation, and is in turn unconformably overlain by the Mt Isa Group and overlain by the Surprise Creek Beds.

West of Mt Isa the Haslingden Group has been intruded by the multi-phase and multi-chambered Sybella Batholith, an A-type composite granitoid complex that was emplaced as a series of distinct phases during an extensional period during the development of the Mt Isa Basin (Hoadley, 2003) i.e.:

- Phase 1: Tholeiitic dolerite (Mosses Tank Dolerite (MTD), containing 45-55% silica) and diorite magma (Mafic Hybrid Complex, containing 58-65% silica).
- Phase 2: Minor suite of rapakivi hybrid (63-69% silica).
- Phase 3: High potassium, iron enriched megacryst potassium-feldspar syenogranite. This is volumetrically the largest phase. (70% silica).
- Phase 4: Microgranite, porphyritic and aplite dykes (75-77% silica).

Figure 6-1. May Downs local geology.



Prepared by Derisk, 2022.

The Sybella Granite is commonly biotite-feldspar-magnetite bearing with a north to northwest trending foliation. Selvedges of the metamorphics encircle the individual Sybella Granite chambers and display a contact metamorphic effect from the Sybella Granite to the intruded sediments.

Syntectonic and post-tectonic dolerite dyke swarms intrude the Haslingden Group, especially the Eastern Creek Volcanics/Alpha Centauri Metamorphics and the Sybella Granite.

At Guns Knob within the Mafic Hybrid Complex there is a lack of mafic rocks with no contamination with felsic magma. Along the eastern edge of the pluton large areas of the Mosses Tank Dolerite (MTD) were

brecciated by the late phase of microgranite along with the mechanical break up during high strain, forming schlieren and hybrids. The oxidation of the mafic magmas during the mixing with the felsic magmas resulted in abundant magnetite.

The Proterozoic lithologies are overlain by the Cambrian Georgina Basin sediments such as the phosphatic Beetle Creek and Inca Formations.

6.3 Geophysics

The reduced-to-pole (RTP) magnetic data indicates the Sybella Granite has highly magnetic contact metamorphic aureoles with disseminated magnetite. Along the eastern edge, the zone of mafic dolerite dykes mixed with the microgranite phase also is highly magnetic with high magnetite content. Internally, the Sybella Granite within the large mass of the pluton is generally characterised by low magnetics. The zones of diorite magma i.e., mixed mafic and felsic magmas, have a higher magnetic signature. The more mafic horizons within the folded Haslingden Group are clearly delineated in the magnetic data.

Through the western section of the Sybella Granite there are northwest trending linear magnetic zones caused by dolerite dykes of the MTD trending towards the higher magnetic mafic hybrid granites through the central zone of the Sybella Pluton.

The radiometric data for the Sybella Granite illustrates light colours reflecting the high potassium, thorium and uranium signatures.

The rimming darker colours are indicative of the variable radiometric signatures of the arenites of the Haslingden Group and the intrusive dolerites. The quartz veins are too small to be highlighted by this broad scale radiometric survey as they are with the magnetic data.

The Beetle Creek and Inca Formations of the Georgina Basin sediments are reflected by the light blue uranium channel.

6.4 Silica Mineralisation

Intermittent or boudinaged quartz veins crop out in the Eastern Creek Volcanics/Alpha Centauri Metamorphics in the vicinity of the intruding foliated Sybella Granite plutons. These veins are within the dominant cleavage. A shallow northwest plunging mineral lineation possibly indicating the plunge of the boudinaged quartz veins. When there are parallel veins or veins at angles the metamorphic rocks have a contorted fabric indicating that the veins occur within shear zones commonly parallel to the granite contact and the main foliation within the metamorphics.

The veins that outcrop at an angle do so in a shear couple fabric with the angled veins within a tension gash fabric. The quartz veins in the dolerite intruded Eastern Volcanics immediately east of the Sybella Granite's dolerite phase mixing with the microgranite phase most likely resulted in this phase of quartz veining.

The quartz veins are cut by a series of northwest trending fractures. At the surface these fractures contain only minor iron oxides. However, at Q1 these fractures contain clay. Drilling at the Iceberg quartz location indicates at depth below the zone of complete oxidation the fractures contain altered and fractured wall rock granite. This material increases the contaminant chemistry in the zone of weathered material and fresh rock.

Quartz veins at Guns Knob, Iceberg and Watertank North occur within sheared foliated Sybella Granite. The veins exhibit a rolling boudinaged outcrop within the foliated granite. Greentech has used silica spectral data to indicate the distribution of the known and unexplored quartz veins within the tenements.

6.5 Other Mineralisation

The Mt Isa province is host to a diverse range of minerals including lead/zinc, copper, gold, uranium, and phosphate. The Beetle Creek and Inca Formations of the Cambrian Georgina Basin have been extensively explored initially for uranium and phosphate and more recently REE mineralisation. These phosphate rich rocks crop out across the central sections of EPM 25894 and EPM 26051.

7 EXPLORATION

7.1 Previous Exploration

This section provides a summary of exploration and mining activities undertaken prior to the grant of the tenements now held by Greentech i.e., EPM 19373 (in 2012), EPM 25894 (in 2015), EPM 26051 (in 2017), ML 100124 (in 2019), and EPM 27457 (in 2020).

Intermittent exploration has been undertaken over the Project area since 1954, when uranium was first discovered, with a focus on a distinct trend of shear-hosted uranium deposits to the east of the Project. Several airborne magnetic and radiometric surveys have covered various parts of the Project tenure and historical exploration has consisted of minor shallow drilling, surface geochemistry, and various geophysical surveys.

More recently, prospecting activity has been directed towards copper, gold, and REE mineralisation (Withnall and Cranfield, 2013). Several other prospects adjacent to the Sybella Granite have been historically worked for uranium, mica, tin, beryllium, and silica.

At various times, the Project area has been covered by many Authorities to Prospect (ATPs) and EPMs, and several small MLs, which were pegged over individual prospects. A summary of the exploration history over the two main tenements where quartz veins have been identified to date (EPM 19373 and EPM 25894) was prepared by ROM and is documented in Table 7-1 and Table 7-2 respectively. ROM noted that no previous exploration has been undertaken for HPQ deposits in the area.

ROM reports that in the 1970's at Guns Knob (EPM 25894) a small quarry was established to mine quartz for road base and has estimated that approximately 19,000 t of quartz was mined. No mining for HPQ applications was undertaken.

Table 7-1. Previous exploration over EPM 19373.

Years	Tenement	Holder	Main Commodity
1961 - 1970	ATP 473	Queensland Mines Ltd	U
	ATP 415	Broken Hill South Ltd	Phosphates
	ATP 620	Eastern Copper Mines NL	Cu Pb Zn U
1971 - 1980	ATP 967	Esso Mineral Enterprises Aust Inc	U
	ATP 1193	Savage Exploration Pty Ltd	U
	ATP 1132	Exoil NL. Transoil NL	Be
	ATP 1705	Urangesellschaft Aust Pty Ltd	U
1981 - 1990	ATP 1975	Urangesellschaft Aust Pty Ltd	U
1991 - 2000	EPM 7966	Dacca Pty Limited	Unknown
	EPM 7866	Granite Resources Pty Ltd	Facing stones
	EPM 9957	Mount Isa Mines Ltd	Cu Au U
	EPM 9386	Mount Isa Mines Ltd	Cu Pb Zn
	EPM 7921	Dacca Pty Limited	Unknown
2001 - 2010	EPM 9585	Mount Isa Mines Ltd	Cu Au U
After 2010	EPM 13098	Mount Isa Mines Ltd	Cu Au U
	EPM 11524	Mount Isa Mines Ltd	U
	EPM 11898	Aeon Walford Creek Limited, Summit Resources (Aust) Pty Ltd	Cu Pb Zn
	EPM 15411	Mount Isa Mines Ltd	Cu Au U
	EPM 19417	Red Metal Limited	Unknown
	EPM 12886	Mount Isa Mines Ltd	Cu Au
	EPM 18951	Red Metal Limited	REE
	EPM 15174	Mount Isa Mines Ltd	Cu Au
EPM 18988	Red Metal Limited	REE	

Source: ROM Resources, 2018.

Table 7-2. Previous exploration over EPM 25894.

Year	Prospect	Company	Mineralisation	% Overlap
1961-1970	ATP 333M	Unknown		71
	ATP 415M	Broken Hill South Limited	U	9
	ATP 473M	Queensland Mines Limited	U	84
	ATP 620M	Eastern Copper Mines NL	U, Cu	15
1971-1980	ATP 727M	Pioneer Mining & Exploration Pty Ltd	Au	11
	ATP 967M	Esso Australia Limited	U	5
	ATP 1132M	Exoil NL	Be	5
	ATP 1193M	Savage Exploration Pty Ltd	U	6
	ATP 1443M	Carpentaria Exploration Co Pty Ltd	Cu, Pb, Zn	1
1981-1990	EPM 1975	Urangesellschaft Australia Pty Ltd	U	1
	EPM 4867	Stockdale Prospecting Limited	Au	1
	EPM 5858	Hornestake Australia Limited	Au	8
1991-2000	EPM 7674	Eastern Copper Mines NL	Cu-Au	4
	EPM 7866	Granite Resources Limited	Granite	7
	EPM 7966	Dacca Pty Limited	Unknown	5
	EPM 9566	Mount Isa Mines Ltd	Cu, Pb, Zn	5
	EPM 10870	WMC Resources Ltd	Cu	6
2001-2010	EPM 9585	Mount Isa Mines Ltd/Xstrata Copper	Cu	6
	EPM 14368	Universal Resources Limited	Pb, Zn, Cu	61
	EPM 16056	Red Metal Limited	Cu, Au, U	7
After 2010	EPM 11524	Mount Isa Mines Ltd/Xstrata Copper	Cu	1
	EPM 11898	Summit Resources Pty Ltd	Pb, Zn, Cu	21
	EPM 15411	Mount Isa Mines Limited	Cu-Au	2
	EPM 19852	Red Metal Limited		31

Source: ROM Resources, 2021.

7.2 Exploration Over the Current Project Tenements

This section provides a summary of exploration and mining activities undertaken since the grant of the tenements now held by Greentech i.e., EPM 19373, EPM 25894, EPM 26051, EPM 27457, and ML 100127. Some of this work was undertaken by Mark Mining and Resources Pty Ltd, Nova Strategic Minerals Pty Ltd, and MEM prior to Greentech's acquisition of MEM.

Exploration focused on quartz mineralisation has consisted of:

- Desktop assessments of mapped quartz reef locations and review of previous exploration that may be relevant to identification of quartz deposits.
- Numerous campaigns of surface mapping, aerial drone surveys, and geochemical sampling at quartz reefs across the Tenements.
- A two-hole diamond drilling program and Mineral Resource assessment at the Iceberg deposit on EPM 19373.
- Several bulk sampling programs at Iceberg and May Downs.
- Trial processing of small batches of quartz at several Chinese processing plants.
- Collation of all quartz reefs documented to date and estimation and reporting of Mineral Resources and Exploration Targets.
- A six-hole diamond drilling program assessing the shallow down-dip extent of the two most significant quartz reefs at May Downs on ML 100124. Drilling was completed in July 2022 and the results from these holes have not been used to estimate Mineral Resources.
- A 150 kg sample was collected from May Downs Reef 2 on ML 100124 and sent to ANZAPLAN in Germany in July 2022. This material will undergo chemical and mineralogical characterisation, processing tests for HPQ and high-value filler applications, and processing tests for (solar) silicon metal production.
- A 50 kg sample was collected from May Downs Reef 2 on ML 100124 and sent to Tomra Sorting GmbH (Tomra) laboratory in Germany in July 2022. This material will undergo testwork to assess potential ore sorting technologies that may be suitable for early-stage product upgrading within Australia.

Exploration focused on other mineralisation has consisted of:

- Desktop assessments and review of previous exploration that may be relevant to the potential for discovery of other minerals.
- Several field inspections of prospective areas on the Tenements for other minerals.
- Reconnaissance field mapping and rock chip sampling.
- A six-hole reverse circulation (RC) drilling program at the Matthew's Gossan prospect on EPM 25894.

Section 8 and Section 9 of this Report provide further information on the results and status of this work.

7.3 Methods Used to Analyse Quartz Reefs

Two chemical assay techniques undertaken by ALS Global (ALS) have been used to analyse most of the quartz mineralisation at May Downs. Both techniques use either a 3-acid or 4-acid digestion:

- ME-ICP64: inductively coupled plasma (ICP) ionisation followed by atomic emission spectroscopy (AES) finish.
- ME-MS61: ICP ionisation followed by mass spectrometry (MS) finish.

The ME-ICP64 technique produces a whole rock analysis. Table 7-3 summarises the elements analysed and lower detection limits.

Table 7-3. ME-ICP64 analysis specifications.

Species	Units	Lower limit	Species	Units	Lower limit
Al ₂ O ₃	%	0.001	MgO	%	0.001
BaO	ppm	10	Na ₂ O	%	0.001
CaO	%	0.001	P ₂ O ₅	%	0.001
Cr ₂ O ₃	ppm	1	TiO ₂	%	0.001
Fe ₂ O ₃	%	0.001	V ₂ O ₅	%	0.001
K ₂ O	%	0.001			

Source: ALS Global.

The ME-MS61 technique is used to analyse major and minor elements. The elements Al, Ca, Fe, K, Mg, S, and Ti are reported as a percentage with most having a lower detection limit of 0.01%. The elements Ag, As, Ba, Be, Bi, Cd, Ce, Cr, Cs, Cu, Ga, Hf, In, La, Li, Mn, Mo, Nb, Ni, P, Pb, Rb, Re, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Tl, U, V, Y, Zn, and Zr are reported in ppm with varying lower detection limits.

Loss on ignition (LOI) was tested with the OA-GRA05 technique that calculates the loss of weight after ignition at 1,000°C. The water content is calculated using a gravimetric procedure after drying at 105°C with the OA-GRA10 method. The laboratory also determined the specific gravity (SG) of the quartz samples using the OA-GRA10 method, a water displacement method that calculates SG relative to unity.

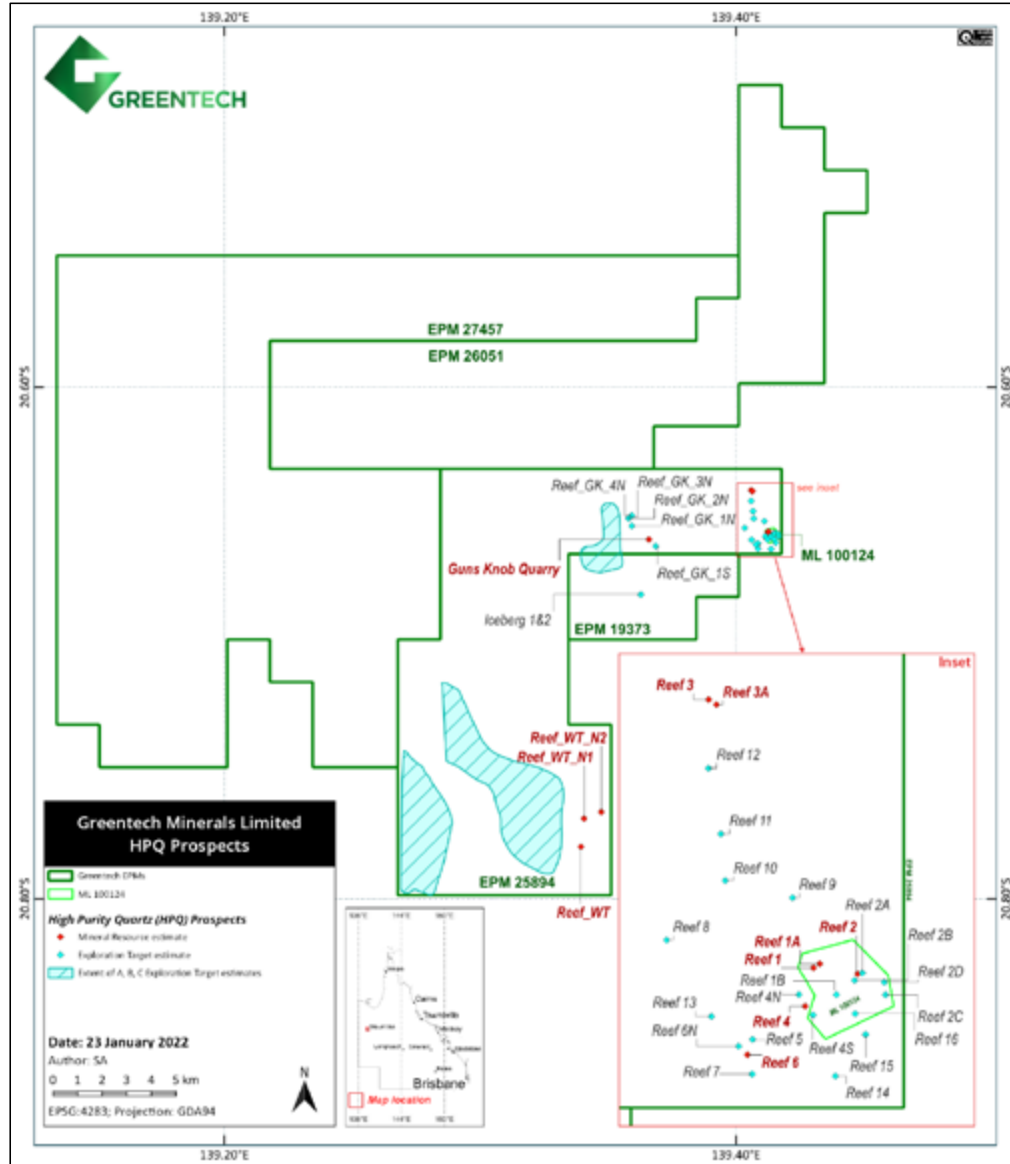
Silica content (SiO₂) is normally not analysed directly but calculated by removing the contaminated elements and the water and LOI factors from the total rock analysis.

At the Iceberg prospect, CSA Global used the ALS method ME-PKG85. In this method, the pulverised sample is digested with hydrofluoric and sulphuric acids. The residue after evaporation is fused with lithium tetraborate and the resulting melt is dissolved in nitric acid. The elements other than silica are determined by ICPAES and the silica content is determined as the loss in weight of the sample following volatilisation by the hydrofluoric acid.

8 HPQ TARGETS

Exploration completed by Greentech and previous tenement holders has identified a large number of quartz veins across the Project. Most work to date has focused on EPM 19373 and EPM 25894. Exploration has identified 11 prospects where a HPQ Mineral Resource has been estimated and 69 prospects where a HPQ Exploration Target has been estimated (Figure 8-1).

Figure 8-1. HPQ prospect locations.



Prepared by Derisk, 2022.

8.1 Prospect Descriptions

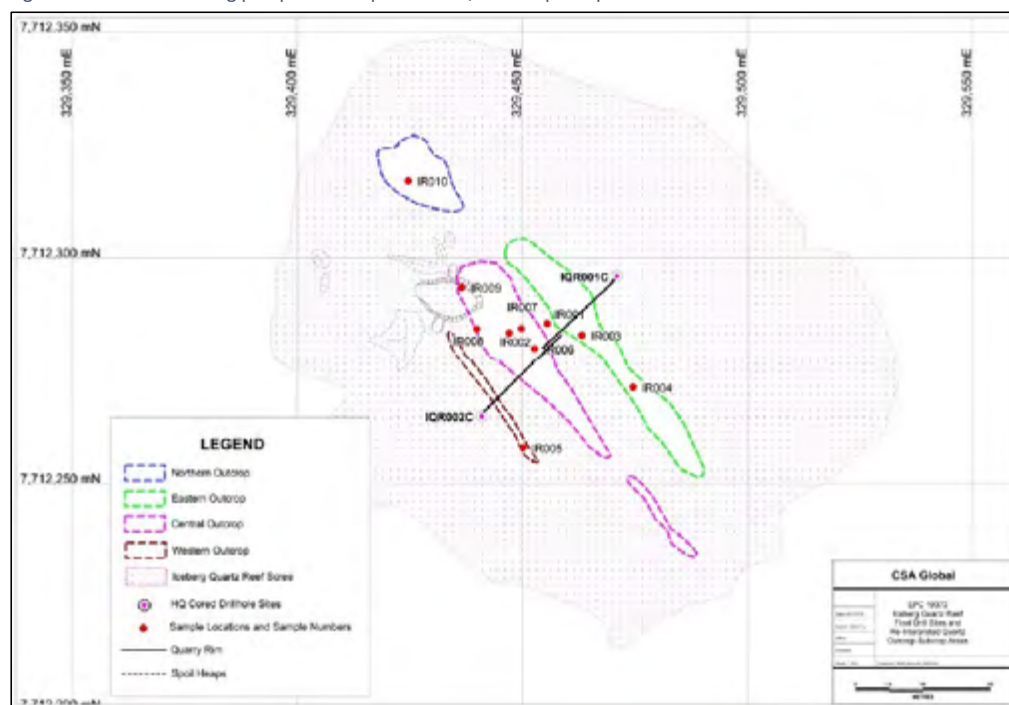
8.1.1 Iceberg (EPM 19373)

The Iceberg prospect is the most advanced HPQ prospect (refer to Figure 8-1 for location). Most of the exploration activity at Iceberg was undertaken by Nova prior to the negotiation of the joint venture agreement with Greentech in April 2018 over EPM 19373 and the now-relinquished ML 100075, which was located within the perimeter of EPM 19373.

In 2015, Nova engaged CSA Global Pty Ltd (CSA Global) to complete exploration at Iceberg and prepare a Mineral Resource estimate. CSA Global completed a surface mapping and sampling program in October 2015 followed by a two-hole diamond drilling program in December 2015 followed by a Mineral Resource estimate in January 2016.

Figure 8-2 shows the mapped extent of the quartz reefs, location of surface rock chip samples, and location of the two drillholes completed. Figure 8-3 presents a cross section showing the drilling and interpreted quartz veins.

Figure 8-2. Plan of Iceberg prospect with quartz veins, rock chip samples and drillholes.

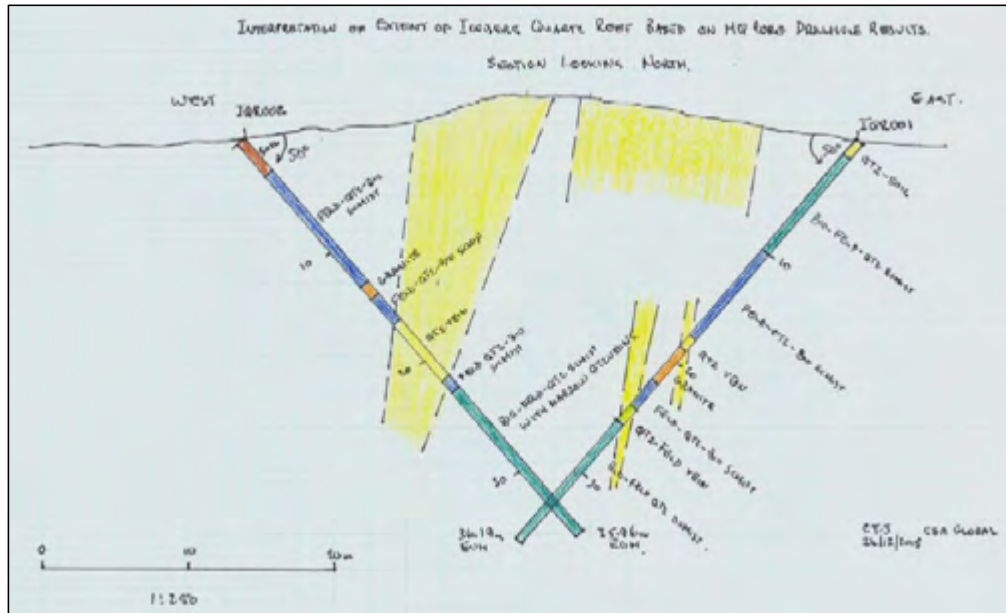


Source: CSA Global, 2016.

CSA Global estimated a total Mineral Resource for Iceberg of 28,000 t of quartz, comprising 11,000 t of Indicated Mineral Resource for the central quartz vein and 18,000 t of Inferred Mineral Resource for the northern, eastern and western quartz veins (CSA, 2016). Subsequently, in January 2016, Nova lodged a ML application over the Iceberg prospect (ML 100075) that was formally granted for a two-year term from 1 August 2018.

The Greentech – Nova joint venture was signed in April 2018 prior to the grant of ML 100075 and involved the assignment of EPM 19373 from Nova to Greentech and Nova receiving a 45% share of the profits from any Mineral Resources extracted and sold from the mining operations.

Figure 8-3. Cross section of Iceberg prospect with quartz veins and drillholes.



Source: CSA Global, 2016.

In June 2019, Greentech mined a 500 t parcel of quartz from Iceberg as part of a bulk sampling program (Figure 8-4). Two shipments of 100 t and 200 t respectively were sent to China for testing by four different HPQ processing facilities. Derisk understands that this material was excavated from the surface and any quartz material with obvious visual contamination was excluded from the bulk sample.

Figure 8-4. Iceberg prospect bulk sampling program, June 2019.



Source: Greentech files.

Greentech advised Derisk that the Company was not provided with any information on processing undertaken at the two plants that received quartz from the first batch of 100 t. Quartz from the second batch of 200 t was provided to Jiangsu and Sinoquartz Tech (Lianyungang) Co. Ltd (Sinoquartz).

For the quartz treated at Jiangsu in 2020, Greentech was provided with no details describing how the quartz was processed. Two assays of trace elements of the raw quartz and one assay of trace elements of the finished HPQ product was provided to Derisk summarising the work completed (Table 8-1).

Table 8-1. Assay results from Jiangsu trial processing of Iceberg quartz, July 2020.

Element	Quantity	Raw quartz (Sample #1)	Raw quartz (Sample #2)	HPQ product (sample #1)
Aluminium	Parts per million	33.10	39.70	15.90
Calcium	Parts per million	1.95	1.51	1.76
Chromium	Parts per million	0.06	0.06	0.02
Copper	Parts per million	0.44	0.07	0.02
Iron	Parts per million	0.91	1.11	0.50
Potassium	Parts per million	0.35	6.07	1.21
Lithium	Parts per million	0.31	1.47	0.76
Magnesium	Parts per million	0.14	0.12	0.06
Manganese	Parts per million	0.03	0.06	0.02
Sodium	Parts per million	5.19	7.20	3.86
Nickel	Parts per million	0.02	<0.01	0.02
Titanium	Parts per million	9.57	15.2	5.24
Total	Parts per million	52.09	72.57	29.91

Source: Greentech files.

Contaminant levels in the raw quartz samples in Table 8-1 total 52 – 73 ppm for the twelve elements analysed and are not significantly different to surface rock chip samples collected by CSA in 2015. In general, the 2015 sampling shows higher levels of some elements, notably aluminium (60 – 112 ppm Al), calcium (14 – 59 ppm Ca), iron (9 – 30 ppm Fe), potassium (8 – 19 ppm K), and sodium (7 – 19 ppm Na). Derisk has not been provided with details of the actual sampling, subsampling, and analytical procedure used by Jiangsu. It is also possible that the raw quartz samples were subject to an acid wash prior to sample preparation and analysis to reduce contaminant levels.

For the quartz processed at Sinoquartz in 2020, Greentech was provided with a flow sheet of the process plant (Figure 8-5) but was not provided with any assays of the raw quartz or the finished HPQ product.

Greentech subsequently reported that the results of the trials undertaken by both Jiangsu and Sinoquartz established that quartz from Iceberg can be beneficiated to a HPQ sand product and a HPQ Grade I product (Yilgarn Minerals Limited, 2019, 2020; Greentech website, 2022).

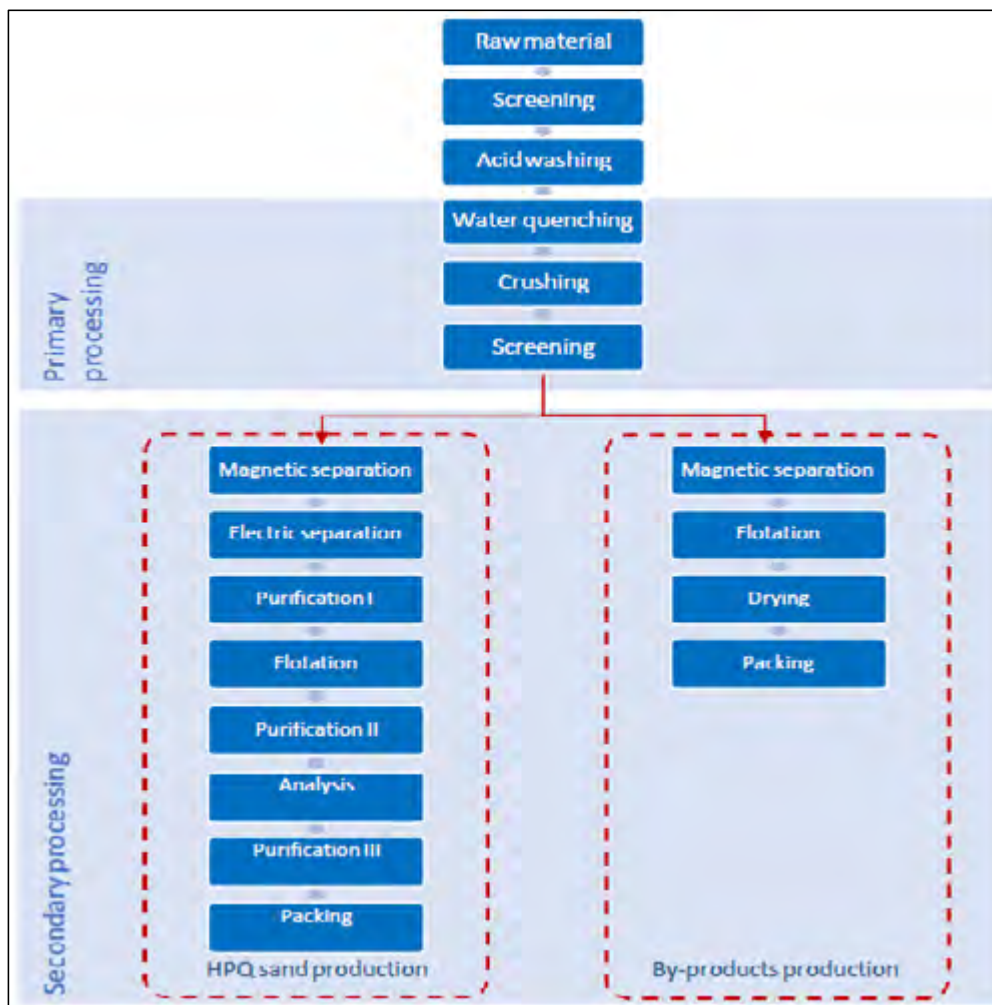
Greentech did not apply for an extension of ML 100075 and the ML was relinquished in 2020. The remaining 200 t of quartz that had been mined and stockpiled as part of the 500 t bulk sample was back-filled at Iceberg and the mined area was rehabilitated. The joint venture with Nova was extinguished and Greentech retains a 100% interest in EPM 19373.

The 2016 Mineral Resource estimate prepared by CSA Global for Nova is not included in the Mineral Resource inventory reported by Greentech, however Greentech engaged ROM to estimate an Exploration Target in preparation for the proposed IPO.

Derisk visited the rehabilitated Iceberg prospect in December 2021. Based on the drilling results, the Eastern Reef contains potassium feldspar and occasional ilmenite. The Central Reef has a central zone of high-grade silica with a calculated grade of 99.9% SiO₂. The outer zone of the reef has a silica content of 99.1 – 99.8% SiO₂. The contamination consists of up to 2,400 ppm Al, 2,200 ppm K, and 400 ppm Fe. These contaminants are from clay inclusions in the fractures of the partially weathered quartz below the completely oxidised quartz.

Derisk also noted that the quartz veins in the drill core contained laminae of a greenish clay +/- limonite fractures and are hosted by a potassium feldspar-quartz-biotite schist, possibly the result of shearing of the Sybella Granite.

Figure 8-5. Sinoquartz process flow diagram for Iceberg quartz treatment in 2020.



Source: Greentech files.

8.1.2 May Downs (ML 100124)

Ten quartz reefs have been identified on ML 100124 (refer to Figure 8-1 for location) and this area will be the main focus for Greentech’s proposed work program. ROM has estimated and reported Mineral Resources for three reefs (1, 1A, and 2) together with an Exploration Target for an additional seven reefs (1B, 2A, 2B, 2C, 2D, 4S, and 16). Figure 8-6 shows a plan of the ML extent, the main quartz reefs and potential locations for proposed mine infrastructure.

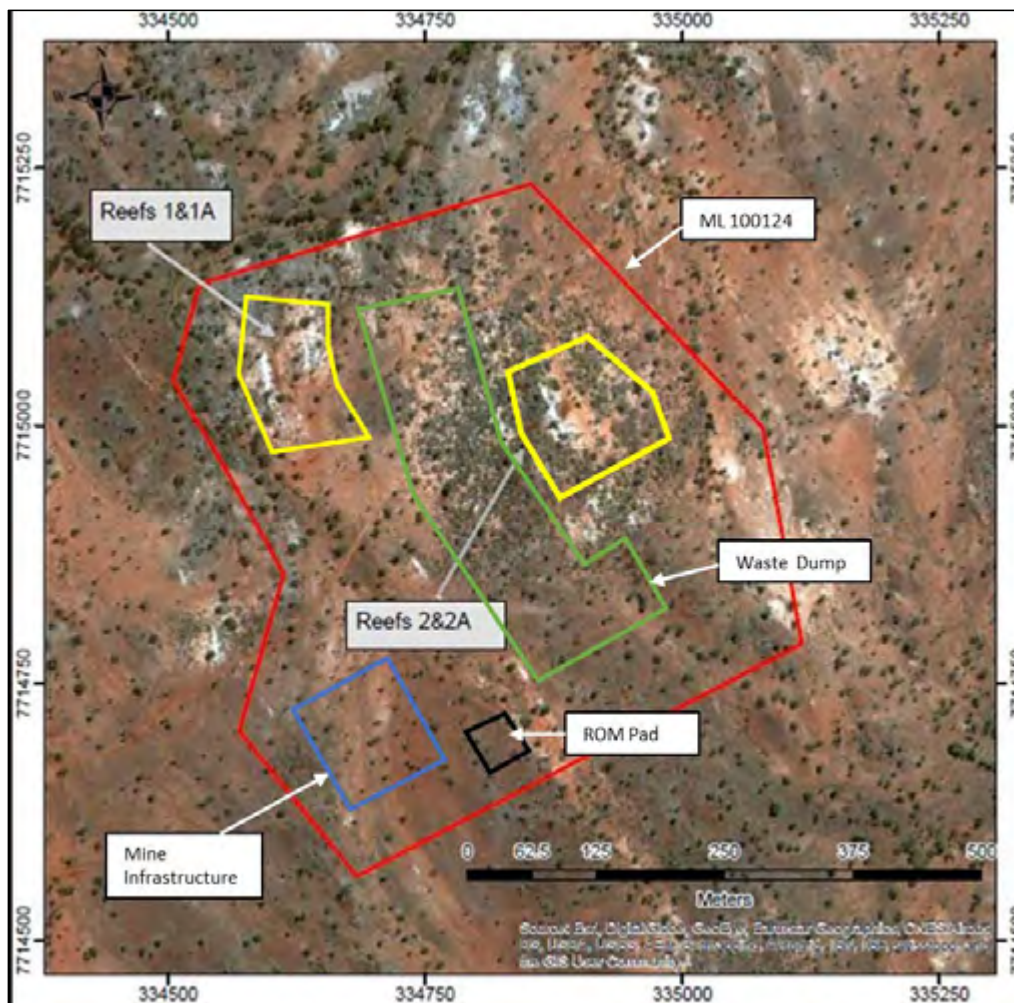
Prior to 2022, Greentech completed aerial mapping of the ML by drone, surface mapping, rock chip sampling and collection of bulk samples for analysis and testing in China. No drilling was completed over the ML to December 2021. Derisk undertook a site visit to the ML in December 2021.

In June and July 2022, Greentech completed a six-hole diamond drilling program at Reef 1 and Reef 2, totalling 155.8 m. These holes were designed to assess the shallow down-dip extent of these two quartz reefs. The holes were geologically logged but no sampling or analysis has been completed prior to the effective date of this Report.

At the same time, Greentech collected surface samples from ML 100124 for testing as follows:

- A 150 kg sample comprising ten 15 kg samples taken approximately 3-5 m apart along the length of Reef 2 were collected and sent to ANZAPLAN in Germany. This material will undergo chemical and mineralogical characterisation, processing tests for HPQ and high-value filler applications, and processing tests for (solar) silicon metal production.
- A 50 kg sample collected from Reef 2, together with eight samples of different country rock were collected and sent to Tomra in Germany. This material will undergo testwork to assess potential ore sorting technologies that may be suitable for early-stage product upgrading within Australia.

Figure 8-6. ML 100124 extent showing location of the main quartz reefs.



Source: SRK, 2020.

At Reef 1/1A, the quartz outcrop consists of limonite fractured quartz with clay (Figure 8-7). The northwest trend is concordant with the dominant cleavage of the schistose greenstones of the Alpha Centauri Metamorphics or Eastern Volcanics. Adjacent to the vein, the schist has a mineral lineation plunging to the northwest. The Sybella Granite outcrops further to the west.

Surface rock chip sampling of Reef 1/1A shows a calculated silica content from four samples of 99.80 – 99.90% SiO₂. Chemical analysis using a 3-acid digest of the samples resulted in the total metal contaminants ranging

from 610 – 1,080 ppm with the loss-on-ignition (LOI) ranging from 500 – 1,000 ppm. The main contaminants were aluminium (90 – 360 ppm Al), calcium (70 – 380 ppm Ca), iron (10 – 70 ppm Fe) and potassium (to 40 ppm K). The sample with the higher Al and Ca correlates with the higher LOI, indicative of clay or mica mineralogy. Chemical analysis using a 4-acid digest resulted in a total metal contaminants of 100 – 600 ppm, lower than that of the 3-acid digest.

A bulk sample, BS1_2016 (19.7 t) from Reef 1/1A was collected and sent to China for analysis. The raw silica content was determined to be 99.92% SiO₂ and the metal contaminants range from 56 – 106 ppm. After washing the metal contaminants content was 80 – 82 ppm.

Figure 8-7. ML 100124 Reef 1 outcrop looking north.



Photograph taken by Derisk during site visit, 2021.

Reef 2 is located approximately 275 m east of Reef 1/1A. There are two veins (Reef 2/2A) dipping steeply to the west and trending northwest similar to Reef 1/1A. The wall rocks are metabasalt with small boulders plunging to the northwest.

Four samples from this reef produced a calculated grade of 99.9% SiO₂. The metal contaminants from the 3-acid digest ranged from 160 – 290 ppm with LOI ranging from 500 – 700 ppm. The aluminium accounts for 90 – 110 ppm Al, calcium is from 30 – 60 ppm Ca, iron is up to 60 ppm Fe, and potassium levels are low (to 10 ppm K). The 4-acid digest returned total metal contaminants of only 100 – 105 ppm. Derisk notes that these results are more encouraging than analyses for Reef 1/1A where clay was noted in the fractures.

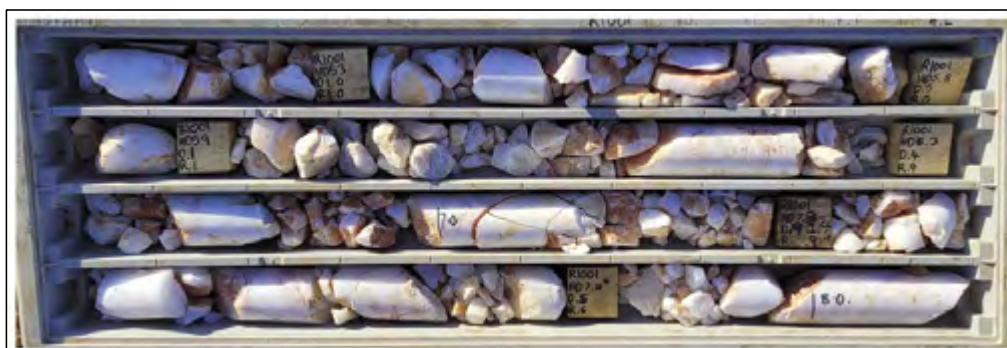
Bulk Sample, BS2_2016 (23.0 t) contained a calculated grade of 99.91% SiO₂ and the metal contaminants amount to 56 – 106 ppm. The contaminants of the raw sample total 106 ppm and that of the washed quartz is lower at 63 – 69 ppm.

The 2022 drilling program was designed to assess the shallow down-dip extent of the two most significant quartz reefs on ML 100124 i.e., Reefs R1 and R2:

- Two drillholes were completed at Reef R1:
 - Drillhole R1001 confirmed a significant thickness of massive white translucent quartz from 2.8 – 13.3 m (Figure 8-8) and a reef depth below surface of approximately 5 m.

- Drillhole R1002 intersected quartz from 9.95 – 15.8 m (Figure 8-9), which was less than expected possibly because the reef dips easterly more shallowly than previously expected, or the dip is variable.
- Four drillholes were completed at Reef R2:
 - Two angled holes were drilled from the western side in an easterly direction towards the reef (R2002 and R2004), based on a steep westerly dip to the reef. Both drillholes passed through thin impure quartz intersections but did not intersect the anticipated massive white translucent quartz reef represented at surface.
 - A further two holes (R2001A and R2003A) were drilled from the eastern side of the reef. R2001A did not intersect the quartz reef but intersected a fault breccia and clay from 7.1 – 9.3 m depth indicating a fault structure cutting the quartz reef at a shallow depth, or the shear fabric surrounding a quartz boudin. R2003A intersected 1.4 m of translucent quartz reef that terminated at a fault breccia at 8.9 – 9.2 m depth that was very similar in character to that intersected in R2001A.

Figure 8-8. Drillhole R2001 from 4.9 – 8.2 m showing a portion of the quartz reef intersection.



Source: Tedman-Jones, 2022.

Figure 8-9. Drillhole R2002 from 10.4 – 13.3 m showing a portion of the quartz reef intersection.



Source: Tedman-Jones, 2022.

Derisk considers that this work confirms that shallow drilling will be crucial for defining the depth extent of all quartz reefs immediately below the surface expression of the reefs.

8.1.3 May Downs North (EPM 25894)

This area extends immediately north of ML 100124 where six quartz reefs have been identified on EPM 25894 (refer to Figure 8-1 for location). ROM has estimated and reported a Mineral Resource for two reefs (3 and 3A) together with an Exploration Target for an additional four reefs (9, 10, 11, and 12). Derisk undertook a site visit to this area in December 2021.

The main occurrence is Reef 3/3A where two veins dipping steeply west outcrop at a low angle to one another (Figure 8-10). The western vein appears to be aligned within a shear fabric with the eastern vein within a tension gash relationship to the shear couple.

Derisk has sighted two samples with a calculated silica grade of 99.88 and 99.92% SiO₂. The total metal contamination ranged from 290 – 390 ppm and LOI is 500 – 800 ppm. One of the samples was analysed with a 4-acid digest, returning the lower contamination content but the higher LOI.

A bulk sample BS3_2016 (25.8 t) contains a calculated grade of 99.97% SiO₂. The raw bulk sample contains 190 ppm metal contaminants and the washed quartz sample contains 77 – 80 ppm contaminants. A quartz sample washed with hydrochloric acid returned a calculated silica content of 100%.

Figure 8-10. EPM 25894 Reef 3 (foreground) and Reef 3A (background).



Photograph taken by Derisk during site visit, 2021.

8.1.4 May Downs West (EPM 25894)

This area extends immediately west of ML 100124 where eight quartz reefs have been identified on EPM 25894 (refer to Figure 8-1 for location). ROM has estimated and reported a Mineral Resource for two reefs (4 and 6) together with an Exploration Target for an additional eight reefs (4N, 5, 6N, 7, 8, 13, 14, and 15). Derisk did not visit this area in December 2021.

Reef 4 is located just to the west of ML 100124. The raw quartz material assayed 870 ppm contaminants, but the processed material only contained 12 ppm contaminants. Reefs 6 and 13 crop out southwest of ML 100124 on the north side of the May Downs access road. A sample from Reef 6 contained 990 ppm contaminants, but the processed material contained 12 ppm contaminants.

8.1.5 Guns Knob (EPM 25894)

Six quartz reefs have been identified at Guns Knob on EPM 25894 (refer to Figure 8-1 for location). This area was mined previously for road aggregate and ROM has estimated a total of approximately 19,000 t of quartz has already been extracted (Figure 8-11). ROM has estimated and reported a Mineral Resource for the main reef (Guns Knob) together with an Exploration Target for an additional five reefs (GK_1N, GK_2N, GK_3N, GK_4N, and GK_1S). Derisk undertook a site visit to this area in December 2021.

The main Guns Knob reef is comprised of two veins. Production of quartz has been completed from two small pits on the western and eastern ends of the two broadly folded quartz veins within a 15 m wide shear hosted by schistose Sybella Granite. The veins variably dip to the south with the southern vein dipping at approximately 40°S and the northern vein dipping at approximately 80°S. Derisk considers that the northern

vein rolls with a variable dip, typical of a vein at the edge of the shear. The southern vein behaves more like a tension gash vein that has rolled into the southern shear edge. Little material is present in the walls of the southern pit but quartz still crops out in the northern wall of the eastern pit. No exposure of quartz is afforded in the pit floors, which are covered by scree.

Figure 8-11. EPM 25894 Guns Knob quarry.



Photograph taken by Derisk during site visit, 2021.

Five samples analysed from Guns Knob with a 3-acid digest produced a calculated grade that ranges from 99.88 – 99.94% SiO₂. The total metal contaminants are from 210 – 730 ppm: aluminium accounted for 90 – 430 ppm Al, iron ranged from 10 – 70 ppm Fe, and potassium was up to 40 ppm K. The LOI range from 400 – 730 ppm and will be largely water as hydroxyls and water of crystallisation. The sample containing higher aluminium correlates with the higher LOI indicating a clay/mica mineralogy. The 4-acid digest resulted in lower total contaminants of 100 – 302 ppm with the aluminium content being only 200 ppm Al and much lower compared to the 3-acid digest.

8.1.6 Water Tank (EPM 25894)

Three quartz reefs have been identified at Water Tank at the southern end of EPM 25894 (refer to Figure 8-1 for location). ROM has estimated and reported a Mineral Resource for all three reefs (WT, WT_N1, and WT_N2). Derisk undertook a site visit to this area in December 2021.

There are three vein systems – a north trending vein at Water Tank and two sub-parallel east-northeast trending veins at Water Tank North (WT_N1 and WT_N2). These veins have a lower relief compared to the other vein systems, being largely scree (Figure 8-12). Derisk considers that these veins are therefore narrower with likely more contamination below the oxidised zone, as evidenced at Iceberg.

The silica content of three analysed samples varies from 99.89 – 99.92% SiO₂. The total metal contamination from the 3-acid digest analyses ranged from 290 – 430 ppm with LOI from 500 – 600 ppm. No samples have been analysed by the 4-acid digestion process at Water Tank.

Figure 8-12. EPM 25894 Water Tank reef area.



Photograph taken by Derisk during site visit, 2021.

8.1.7 Other Reefs (EPM 19373 and EPM 25894)

Greentech has also identified several broad areas on EPM 19373 and EPM 25894 containing multiple quartz reefs (refer to Figure 8-1 for location). ROM has estimated and reported an Exploration Target for a total of 41 reefs, grouping these into three reef types as follows:

- A Reefs – typically interpreted to be greater than 200 m in length and 3 – 10 m wide. ROM has identified eight A Reefs.
- B Reefs – typically interpreted to be 100 – 200 m in length and 2 – 4 m wide. ROM has identified seven B Reefs.
- C Reefs – typically interpreted to be less than 100 m in length and less than 3 m wide. ROM has identified 26 C Reefs.

Derisk did not visit any of these reef areas but notes that the Exploration Target estimated for the A Reefs contributes more than 60% of the total Exploration Target for the Project.

8.2 Mineral Resource

ROM has been engaged by Greentech to prepare four resource estimates for the Project – in 2016, 2019, 2021, and 2022. All reefs where a Mineral Resource has been estimated are outcropping, have been subject to an aerial drone survey, have been geologically mapped, and have been geochemically sampled. Digital topographic maps were constructed for most reefs to support volume estimates. For the larger reefs that were well mapped and sampled, triangulated wireframes were generated to create the reef volume. For smaller reefs, trapezoidal shapes were created and manual calculations performed to generate volume. ROM applied a density of either 2.64 t/m³ or 2.65 t/m³ to estimate tonnes (quartz has a density of 2.65 t/m³).

ROM assumed that the quartz reefs are essentially homogeneous and therefore decided it was unnecessary to build a 3D block model of each reef to estimate silica content or impurities. Silica content was the weighted average grade of all available rock chip samples as there are no drillholes at any of the reefs where Mineral Resources have been estimated. ROM notes that where reefs have been subject to bulk samples (Reef 1, 2, and 3), weighting has been influenced by the results of the bulk samples. In determining the silica content of samples used for Mineral Resource estimation, ROM ignored LOI and calculated the silica content as 100% minus impurities (excluding LOI).

Table 8-2 summarises the HPQ Mineral Resource estimated and reported by ROM in June 2022. No changes have been made between June 2022 and the effective date of this Report (31 July 2022). The HPQ Mineral Resource is for 11 reefs and totals 388 kt, comprising 72 kt of Measured Resource, 161 kt of Indicated Resource, and 155 kt of Inferred Resource. No Ore Reserve has been estimated to date.

Table 8-2. May Downs HPQ Mineral Resources reported at an effective date of 31 July 2022.

Prospect	Tenement	Measured (kt)	Indicated (kt)	Inferred (kt)	Total (kt)	SiO ₂ (%)
Reef 1	ML 100124	5	1	3	10	99.93
Reef 1A	ML 100124	-	<1	<1	1	99.96
Reef 2	ML 100124	9	4	5	19	99.96
Reef 3	EPM 25894	20	19	12	51	99.95
Reef 3A	EPM 25894	-	7	5	12	99.95
Reef 4	EPM 25894	-	3	2	4	99.96
Reef 6	EPM 25894	-	<1	<1	1	99.96
Guns Knob	EPM 25894	38	78	6	121	99.96
Reef_WT	EPM 25894	-	<1	2	2	99.96
Reef_WT_N1	EPM 25894	-	12	30	42	99.96
Reef_WT_N2	EPM 25894	-	36	89	124	99.96
TOTAL		72	161	155	388	99.96

Note: 1. Competent Person for estimation and reporting – Mark Biggs (ROM).
2. Derisk has rounded resource sub-totals to reflect the accuracy of estimates and this may lead to rounding errors.
3. No cut-off criterion for SiO₂ content was applied.
4. Calculated SiO₂ contents ignore the determination of LOI, which typically ranges from 0.04% to 0.08%

ROM has classified Measured Resources where a reef is within 15 m of a bulk sampling location and/or where there are more than five samples to support the estimate of SiO₂. Indicated Resources can be more than 15 m from a bulk sample site and/or there are 2 – 5 samples to support the estimate of SiO₂. Both Measured and Indicated Resources must not extend below ground level. Inferred Resources are the projection of Measured and Indicated Resources that can extend for a maximum depth of 30 m below the ground level.

In 2020, Greentech engaged SRK Consulting (Australasia) Pty Ltd (SRK) to complete a review of the 2019 ROM Mineral Resource estimate (SRK, 2020). SRK concluded that the wireframes generated for the above-ground portion of the reefs, with supporting assay data, were reflective of the observed geology and were appropriate for the reporting of a Measured and Indicated Mineral Resource for the Project. However, SRK expressed the view that for the portion of the Inferred Mineral Resource located below ground level, this Mineral Resource should be more accurately reported as an Exploration Target as there is no supporting drilling or assay data.

Derisk notes that for the 2019 Mineral Resource estimate ROM reported a total of 480 kt of Inferred Mineral Resource. No new data has been collected between 2019 and 2022 but ROM has reduced the Inferred Resource for the 2022 estimate to 155 kt, which suggests that ROM has taken on board some of the concern expressed by SRK relating to the 2019 Inferred Resource.

Derisk considers that the June 2022 Mineral Resource estimate prepared by ROM is reasonable and defensible. However, Derisk considers that the estimate of in-situ SiO₂ content should be estimated by including the impact of LOI. Consequently, the calculated SiO₂ content of samples contributing to the Mineral Resource estimate should equal 100% minus LOI minus impurities. This will have the effect of reducing the estimated SiO₂ content by 0.06 – 0.08% for each reef.

Derisk also notes that the Mineral Resource for ML 100124 totals 30 kt. Therefore, Greentech will need to establish more Mineral Resource within the ML as soon as possible to support its proposed annual production rates and fast track the next application for a ML to ensure continuity of production. The two largest targets are Guns Knob (121 kt) and Water Tank Reef WT_N2 (126 kt). Both of these reefs have the potential to sustain at least five years operation at the proposed production rates indicated by Greentech.

8.3 Exploration Target

ROM was also engaged by Greentech to prepare three Exploration Target estimates for the Project in 2016, 2019, 2021, and 2022. Table 8-3 summarises the total HPQ Exploration Target estimated and reported by ROM as at 31 July 2022, which comprises a total of 69 reefs.

The Exploration Target is based on actual exploration completed to date and has an estimated tonnes range from 160 – 540 kt at an estimated grade range of 99.0 – 99.9% SiO₂. Derisk notes that the potential quantity and grade of this material is conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

All reefs where an Exploration Target has been estimated are outcropping or sub-cropping. Generally, there has been no aerial drone survey, geological mapping or geochemical sampling, although Iceberg is the exception. ROM estimated the surface area extent of each quartz reef, assumed a vertical thickness typically from 2 – 10 m, and applied a density of 2.64 t/m³ to estimate tonnes.

Greentech intends to undertake a staged exploration program to assess the validity of the Exploration Targets and convert these to Mineral Resource estimates. Initially, exploration will focus on the targets identified in ML 100124 and include aerial drone surveys, geological mapping, geochemical sampling and analysis.

Derisk considers that the July 2022 Exploration Target estimate prepared by ROM is reasonable and defensible. Many of the reefs comprising the Exploration Target are small and are estimated to be less than 5 kt at surface. To have reasonable prospects for eventual economic extraction, Derisk considers that small reefs will need to be located close to larger reefs to justify inclusion in a ML.

Table 8-3. May Downs HPQ Exploration Target reported at an effective date of 31 July 2022.

Prospect	Tenement	Tonnes – Low (kt)	Tonnes – High (kt)	SiO ₂ – Low (%)	SiO ₂ – High (%)
Reef 1B	ML 100124	1	2	99.0	99.9
Reef 2A	ML 100124	4	12	99.0	99.9
Reef 2B	ML 100124	<1	1	99.0	99.9
Reef 2C	ML 100124	<1	1	99.0	99.9
Reef 2D	ML 100124	1	2	99.0	99.9
Reef 4S	ML 100124	<1	<1	99.0	99.9
Reef 16	ML 100124	<1	<1	99.0	99.9
Iceberg Central	EPM 19373	8	16	99.0	99.9
Iceberg Eastern	EPM 19373	6	24	99.0	99.9
Iceberg Western	EPM 19373	1	4	99.0	99.9
Iceberg Northern	EPM 19373	1	6	99.0	99.9
Reef_GK_1N	EPM 25894	1	3	99.0	99.9
Reef_GK_2N	EPM 25894	<1	1	99.0	99.9
Reef_GK_3N	EPM 25894	<1	1	99.0	99.9
Reef_GK_4N	EPM 25894	<1	1	99.0	99.9
Reef_GK_1S	EPM 25894	2	6	99.0	99.9
Reef 4N	EPM 25894	<1	1	99.0	99.9
Reef 5	EPM 25894	<1	1	99.0	99.9
Reef 6N	EPM 25894	<1	<1	99.0	99.9
Reef 7	EPM 25894	<1	1	99.0	99.9
Reef 8	EPM 25894	2	7	99.0	99.9
Reef 9	EPM 25894	1	3	99.0	99.9
Reef 10	EPM 25894	1	4	99.0	99.9
Reef 11	EPM 25894	1	2	99.0	99.9
Reef 12	EPM 25894	1	3	99.0	99.9
Reef 13	EPM 25894	1	3	99.0	99.9
Reef 14	EPM 25894	1	2	99.0	99.9
Reef 15	EPM 25894	10	25	99.0	99.9
A Reefs (8)	EPM 19373/25894	100	350	99.0	99.9
B Reefs (7)	EPM 19373/25894	10	40	99.0	99.9
C Reefs (26)	EPM 19373/25894	8	20	99.0	99.9
TOTAL		160	540	99.0	99.9

Note: 1. Competent Person for estimation and reporting – Mark Biggs
2. Derisk has rounded resource sub-totals to reflect the accuracy of estimates and this may lead to rounding errors.

8.4 Assessment

The quartz reefs at May Downs that have been sampled and tested, and used to estimate Mineral Resources are all surficial and completely oxidised material, except for the drill samples collected at the Iceberg Prospect. The transition of the quartz reefs from complete oxidation through weathered material to fresh rock has not been tested due to the lack of drilling, except at Iceberg. As noted in Section 8.1.2, drilling has been completed recently at ML 100124 but this core has not yet been analysed, and therefore at the effective date of this Report provides no new information on the nature and chemical composition of the quartz immediately below the surface outcrop.

Derisk considers that the degree of oxidation and weathering will affect the amounts of contaminant material within the quartz, whether interstitial tourmaline, ilmenite or fracture-hosted rock fragments such as schist, granite or clay minerals from the weathered rock fragments. These contaminants can usually be reduced or eliminated during the processing process, but the types of contaminants need to be assessed before designing the process plant. Such an assessment will need a series of shallow drillholes on sections at increasing depth to understand the weathering process.

The silica grade of the product and the level of contamination dictate the use of the HPQ quartz sand and the realised price of the finished product (refer to Table 5-2 and Table 5-2). More complex processing will result in higher grade HPQ but starting with a better raw product is easier and less costly. The completely oxidised material that has been used in the current evaluation is obviously the better material.

Further test work on the less oxidised and weathered quartz needs to be completed to test the viability of processing quartz material that is not completely oxidised. Substitutional impurities occur where a silicon atom has been replaced in the silica molecule itself, whereas interstitial impurities exist between silica molecules and are generally easier to remove.

Derisk notes that Greentech has recently collected surface samples for detailed chemical and mineralogical characterisation, processing options testwork, and ore sorting characterisation. This work will be critical in informing management on HPQ process options and potential markets.

9 OTHER MINERALS

9.1 Greentech Exploration

As noted in Section 7, there has been intermittent exploration for other minerals across the Project area, mostly prior to 2010. This exploration was aimed at base metals, uranium, gold, phosphate, and REE.

Greentech has completed a desktop review of previous exploration and collated all available Geochemical and geophysical data covering the Tenements. Specific assessments of the prospectivity of the Tenements for base metals, particularly copper, and phosphate were completed.

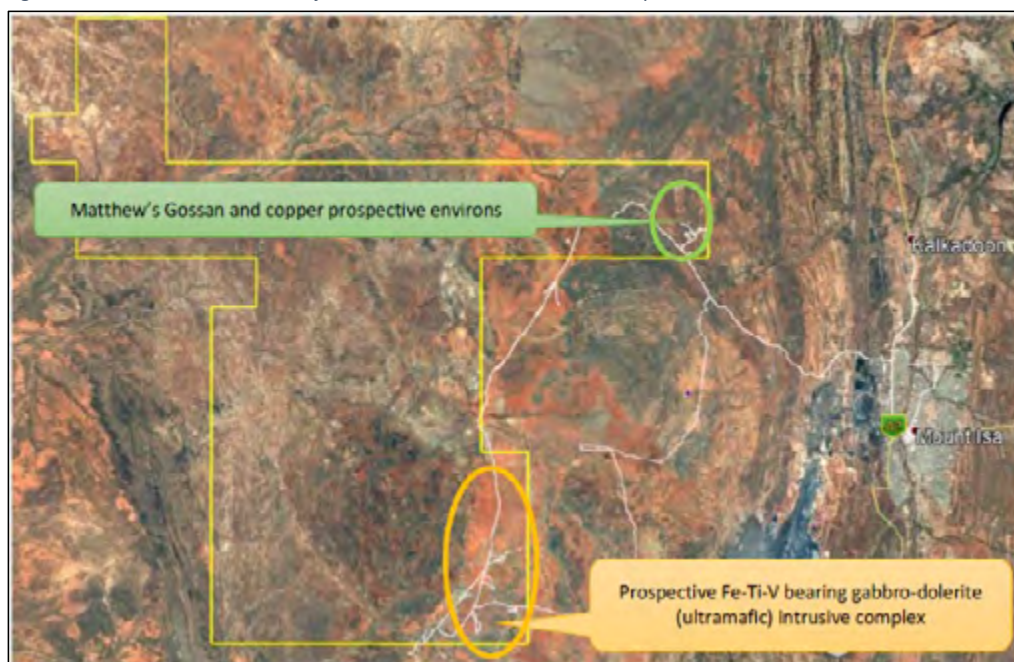
In January 2018, MEM entered into a Farm-In Agreement with Multimines in which Multimines could earn a 20% interest in EPM 25894 for all minerals other than quartz through the minimum expenditure of AUD 65,000 and a maximum expenditure of AUD 100,000 within six months of the start of the agreement.

Greentech/Multimines completed an initial field reconnaissance mapping and sampling program over EPM 25894 in February 2018 with the objectives of:

- Assessing the potential of known mafic gabbro-dolerite with possible ultramafic affinities to contain iron-titanium-vanadium mineralisation that may be economically significant.
- Sampling previously discovered copper sulphide mineralised veins hosted in a brecciated amphibolite at the Matthew's Gossan prospect.

Figure 9-1 shows the location of the reconnaissance program. Greentech undertook outcrop geological mapping and collected rock chip samples and lag samples for geochemical analysis.

Figure 9-1. Areas of EPM 25894 subject to field reconnaissance in February 2018.



Source: Tedman-Jones C., 2018.

This work identified weakly elevated titanium and vanadium content of the sampled dolerite-gabbro and basaltic (altered) rocks and the presence of ilmenite (the major source of titanium). The work concluded that there is some potential for iron-titanium-vanadium mineralisation that deserves further work. Since 2018, no further exploration for iron-titanium-vanadium has been undertaken.

The February 2018 program also demonstrated significant surface concentrations of copper and gold at the Matthew's Gossan prospect where 11 samples returned copper analyses of greater than 1% Cu and elevated gold grades up to 0.49 g/t Au (Figure 9-2 and Figure 9-3).

Figure 9-2. Surface extent of Matthew's Gossan prospect.



Source: Tedman-Jones C., 2018.

Figure 9-3. Matthew's Gossan sample, returning 5.1% Cu, 0.49 g/t Au, 8.2 g/t Ag.



Source: Tedman-Jones C., 2018.

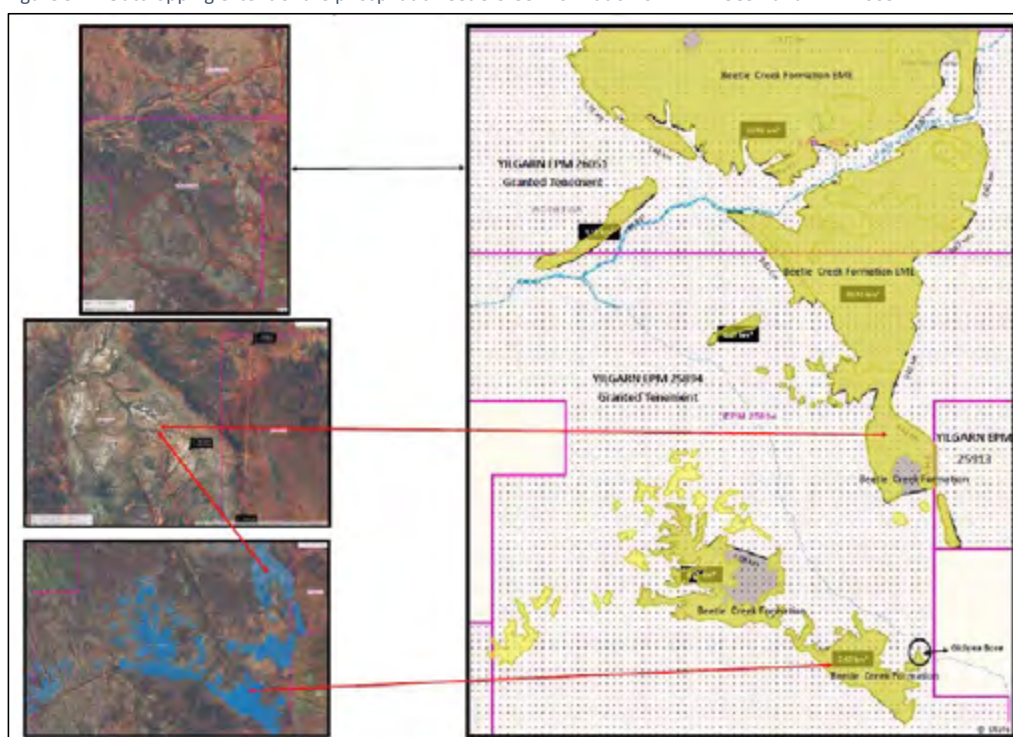
In September 2018, Greentech/Multimines completed a six-hole RC drilling program to test the Matthew's Gossan prospect (CSA Global, 2018). All holes were drilled at a 50° dip to the south to test an interpreted north-dipping fault zone hosting the copper mineralisation at surface. Little copper mineralisation was intersected in the drilling with the best sample returning 1.0 m @ 0.23% Cu. CSA Global concluded that the

drillholes adequately tested the target area, found no significant mineralisation, and no further work on this prospect was required.

The exploration activities completed in 2018 enabled Multimines to earn a 20% share of EPM 25894 for all minerals other than quartz. No further exploration for copper-gold has been undertaken.

In 2019 Greentech/Multimines reviewed the potential for phosphate mineralisation on the Tenements. EPM 25894 and EPM 26051 are host to over 60 km² of outcropping sediments of the Cambrian Beetle Creek Formation and Inca Formation (Figure 9-4). These sediments are marine carbonate sediments of the Georgina Basin that host large deposits of phosphate in the district at deposits such as Phosphate Hill, Lady Annie, D Tree, Wonarah, and Highland Plains (Boya Resources, 2019). This review concluded that further work was justified to assess the potential for phosphate at the Project. No activity has been undertaken to date.

Figure 9-4. Outcropping extent of the phosphatic Beetle Creek Formation on EPM 25894 and EPM 26051.



Source: Boya Resources, 2019.

9.2 Exploration on Adjacent Tenements

Chalkos Metals Limited (Chalkos) holds the tenements immediately to the east and south of the Greentech tenements, and considers they are prospective for copper. Their tenements cover parts of the Sybella Batholith but are mostly dominated by the older Leichhardt Superbasin rocks. Outcropping copper expressions are found across the tenements, most notably in association with pegmatite intrusions or with variably iron-oxide altered metabasalts of the Eastern Creek Volcanics. Chalkos has defined seven copper targets to date (<https://chalkosmetals.com.au/mount-isa-project/>) and has recently completed a drilling program (Chalkos Metals Limited, 2022) reporting encouraging results.

Greentech considers that the host rocks for the copper mineralisation identified by Chalkos extend into the Greentech tenements, which supports their view that the southern and eastern margins of EPM19373 and EPM 25894 are prospective for copper mineralisation.

9.3 Assessment

Derisk considers that the Tenements held by Greentech are prospective for other minerals and further work is warranted to assess the potential for the discovery of other minerals. Exploration is at a very early stage and Derisk understands that Greentech intends to use some of the IPO proceeds to target further exploration for other minerals over the Project area.

10 PROPOSED WORK PROGRAM AND BUDGET

10.1 Work Program

Post-IPO, Greentech has proposed a two-year work program comprised of exploration, testwork, and feasibility studies focused on proving up the technical and economic viability of a small HPQ operation. By the end of its second year, Greentech aspires to be producing and selling HPQ feedstock. Greentech also plans to evaluate the potential for discovery of other minerals on the Tenements.

Greentech recognises the importance of undertaking detailed testwork to demonstrate that quartz from May Downs can be beneficiated to HPQ products and has sent samples of quartz to Germany for characterisation, processing testwork, and ore sorting characterisation to be completed in the second half of 2022.

The main components of the two-year work program include:

- Resource to Reserve conversion sufficient for 5 years production.
- Completion of bench-scale processing and beneficiation trials by ANZAPLAN to optimise product quality and price for quartz from the Project.
- Commencement of mining, crushing, sorting and stockpiling.
- Marketing and offtake negotiations.
- Design and construction of an on-site, front-end pilot processing plant to produce Grade I HPQ.

Greentech plans to raise from AUD 5.0 – 7.0 M as part of the IPO. This translates into a direct exploration and operational expenditure ranging from AUD 3.30 – 5.17 M respectively. The majority of the proposed expenditure is focused on further exploration, testwork and feasibility, mining, and construction of a pilot scale processing plant to upgrade raw quartz feedstock into a saleable HPQ product for export if the maximum subscription is achieved.

Derisk considers that the work program prepared by Greentech is reasonable and defensible. The key risks are potential delays and/or complications associated with the HPQ testwork required to support plant design, and potential delays and/or additional costs incurred in construction of the process plant.

10.2 Budget

Greentech plans to raise from AUD 5.0 – 7.0 M as part of the IPO. This translates into a direct exploration and operational expenditure that ranges from AUD 3.30 M (Table 10-1) to AUD 5.17 M (Table 10-2). The majority of the proposed expenditure is focused on further exploration, testwork and feasibility, and commencing construction of a process plant to upgrade raw quartz feedstock into a saleable HPQ product for export. If the maximum fundraising is achieved, the Company plans to construct a feasibility stage beneficiation plant.

Table 10-1. Proposed two-year budget based on fundraising of AUD 5.0 M.

Cost	Year 1 Budget (AUD 000)	Year 2 Budget (AUD 000)	Total Budget (AUD 000)
Exploration (HPQ and other minerals)	300	300	600
Testwork and feasibility studies	450	110	560
Mine Development	400	200	600
Mine and processing operating costs	250	300	550
Beneficiation plant	-	-	-
Tenement payment to MEM	350	-	350
Sales and marketing	80	40	120
Working capital	260	260	520
Sub-Total (Technical)	2,090	1,210	3,300
Corporate costs	460	320	780
Loan repayment	-	240	240
IPO Offer costs	680	-	680
Total	3,230	1,770	5,000

Table 10-2. Proposed two-year budget based on fundraising of AUD 7.0 M.

Cost	Year 1 Budget (AUD 000)	Year 2 Budget (AUD 000)	Total Budget (AUD 000)
Exploration (HPQ and other minerals)	550	550	1,100
Testwork and feasibility studies	450	190	640
Mine Development	450	250	700
Mine and processing operating costs	400	500	900
Beneficiation plant	200	400	600
Tenement payment to MEM	350	-	350
Sales and marketing	120	60	180
Working capital	400	300	700
Sub-Total (Technical)	2,920	2,250	5,170
Corporate costs	460	320	780
Loan repayment	-	240	240
IPO Offer costs	810	-	810
Total	4,190	2,810	7,000

Greentech has advised Derisk that the proposed budgets exceed the EPM and ML expenditure commitments for all tenements and will keep all tenements in good standing. Derisk has reviewed the proposed exploration and development program/budget and considers it is reasonable and appropriate, although the schedule will be challenging, particularly if a pilot scale processing plant is to be built.

11 RISKS AND OPPORTUNITIES

Derisk considers the key risks for Greentech are:

- **Technical risk:** Greentech may be unsuccessful in its aim of establishing a viable process to upgrade raw quartz feedstock into a marketable HPQ product for export.
- **Economic risk:** Greentech may be unsuccessful in establishing a financially viable mining and processing operation to supply a marketable HPQ product for export.
- **Tenure risk:** Greentech holds exploration tenements and a mining lease that must be maintained. The Company will need to maintain its tenements in good standing and meet expenditure and other commitments to be sure of retaining tenure.

Greentech will need to apply for additional MLs to sustain future production of HPQ, as most of the existing Mineral Resources and Exploration Targets are not located on ML 100124. New ML applications can have a substantial lead time and Greentech will need to manage applications for new MLs efficiently to avoid delays.

- **Funding risk:** Greentech will need to raise further funds to finance expansion of HPQ operations beyond the next two years.

The key opportunity for Greentech is the establishment of a long-term profitable vertically integrated HPQ mining and processing operation based on its quartz feedstock at Mt Isa. The other main opportunity is the discovery of a new deposit containing minerals other than silica/HPQ.

12 CONCLUSIONS

Greentech holds tenements comprising one granted ML and four granted EPMs near Mt Isa in northwest Qld, with a total area of 651 km². The Tenements host many occurrences of outcropping quartz veins and Greentech has identified and estimated a HPQ Mineral Resource at 11 prospects and has estimated an Exploration Target over an additional 69 prospects. Work has also identified further quartz veins across the Tenements that have yet to be investigated in detail and the Tenements are prospective for minerals other than quartz.

Preliminary testing and processing trials undertaken by several Chinese firms suggest that quartz mined from May Downs can be beneficiated into marketable HPQ products. Upon listing, Greentech has proposed a two-year work program comprised of exploration, testwork, and feasibility studies focused on proving up the technical and economic viability of a HPQ operation, prior to commencement of mining and pilot plant on-site processing.

Derisk considers that Greentech has identified adequate Mineral Resources to support the first five years of a small – modest quartz mining and HPQ processing operation at Mt Isa.

Some testwork and processing trials have been completed that suggest the May Downs quartz deposits can be beneficiated into a marketable HPQ product. However, Derisk considers that sufficient testwork and processing trials have not been completed to date and this will be a major focus for the Company immediately prior to and upon listing. This work to be completed by ANZAPLAN will be crucial in driving the technical studies required to estimate Ore Reserves and establish a technically viable process route to create a marketable HPQ product that will be financially viable. Greentech plans to complete this work before the end of year one, then progress to construction of a small processing plant to produce entry-level HPQ sand product. In parallel, Greentech intends to continue exploration of its HPQ targets and assess opportunities to explore for other minerals.

Greentech plans to raise from AUD 5.0 – 7.0 M as part of the IPO. This translates into a direct exploration and operational expenditure ranging from AUD 3.30 – 5.17 M respectively. Derisk believes that the goals set by Greentech are achievable within this budget framework but will be challenging and there is potential for slippage in the schedule due to delays and/or technical complexities. The key risks are potential delays and/or complications associated with the proposed HPQ testwork required to support plant design, and potential delays and/or additional costs incurred in construction of the pilot scale process plant.

13 PRACTITIONER/DIRECTOR STATEMENTS

13.1 Graham Rolfe – Practitioner/Specialist

I, Graham Rolfe, confirm that I am an Associate Principal Geologist with Derisk and that I contributed to the production of the report titled Independent Geologist Report of the May Downs High Purity Quartz Project Mount Isa, northwest Queensland, with an effective date of 31 July 2022.

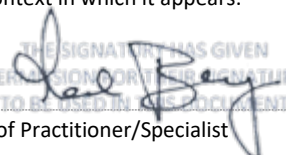
I confirm that I am independent of Greentech Minerals Limited, its Directors, substantial shareholders, and their associates. In addition, I have no interest, direct or indirect, in Greentech Minerals Limited, its subsidiaries, or associated companies, and will not receive benefits other than remuneration paid to Derisk in connection with this independent geologist report.

I also confirm that I am the Practitioner and Specialist for the technical assessment in this report. I am a Fellow of The Australian Institute of Geologists and have over 45 years of relevant experience. I have not been found in breach of any relevant rule or law of that institute, and I am not the subject of any disciplinary proceeding that I am aware of.

I have read and understood the requirements of the VALMIN Code. I am a Specialist as defined by the VALMIN Code, having more than the minimum experience relevant to the style of mineralisation and type of deposit described in this report, and to the activity for which I am accepting Practitioner responsibility.

I have reviewed this report, to which this Consent Statement applies. I consent to the release of this report and to the inclusion in this report of the matters and supporting information based on my information in the form and context in which it appears.

THE SIGNATORY HAS GIVEN
PERMISSION OF HIS SIGNATURE
TO BE USED IN THIS DOCUMENT



Signature of Practitioner/Specialist

27/10/2022

Date

13.2 Mark Berry – Director/Specialist

I, Mark Berry, confirm that I am a Principal Consultant and Director of Derisk and that I supervised the production of the report titled Independent Geologist Report of the May Downs High Purity Quartz Project Mount Isa, northwest Queensland, with an effective date of 31 July 2022.


I confirm that my firm's Directors, shareholders, employees, and I are independent of Greentech Minerals Limited, its Directors, substantial shareholders, and their associates. In addition, my firm's Directors, substantial shareholders, employees, and I have no interest, direct or indirect, in Greentech Minerals Limited, its subsidiaries, or associated companies, and will not receive benefits other than remuneration paid to Derisk in connection with this independent geologist report. Remuneration paid to Derisk is not dependent on the findings of this report.

I also confirm that I contributed to the technical assessment in this report. I have read and understood the requirements of the VALMIN Code. I am a Specialist as defined by the VALMIN Code, having more than the minimum experience relevant to the style of mineralisation and type of deposit described in this report, and to the activity for which I am accepting Practitioner responsibility.

I am a Member of The Australian Institute of Geologists and have over 40 years of relevant experience. I have not been found in breach of any relevant rule or law of that institute, and I am not the subject of any disciplinary proceeding that I am aware of.

I have reviewed this report, to which this Consent Statement applies. I consent to the release of this report and to the inclusion in this report of the matters and supporting information based on my information in the form and context in which it appears.

THE SIGNATORY HAS GIVEN
PERMISSION OF HIS SIGNATURE
TO BE USED IN THIS DOCUMENT



Signature of Practitioner/Specialist

27/10/2022

Date

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15 DEFINITIONS AND GLOSSARY

Table 15-1 provides a list of the definitions used in this report together with a glossary of relevant terms and abbreviations.

Table 15-1. Definitions and glossary of terms.

Term	Description
AAICD	Affiliate of the Australian Institute of Company Directors
AES	Atomic emission spectroscopy
ANZAPLAN	Dorfner Analysenzentrum und Anlagenplanungsgesellschaft mbH
ASX	Australian Securities Exchange
AUD	Australian Dollar(s)
Competent Person (as defined by the JORC Code)	A minerals industry professional who is a Member or Fellow of The Australasian Institute of Mining and Metallurgy, or of the Australian Institute of Geoscientists, or of a Recognised Professional Organisation, as included in a list available on the JORC and ASX websites. These organisations have enforceable disciplinary processes including the powers to suspend or expel a member. A Competent Person must have a minimum of five years relevant experience in the style of mineralisation or type of deposit under consideration and in the activity which that person is undertaking.
CSA Global	CSA Global Pty Ltd
DD	diamond drill
Derisk	Derisk Geomining Consultants Pty Ltd
EMC	Epoxy moulding compound
EPM	Exploration permit for minerals
Exploration Results (as defined by the JORC Code)	Data and information generated by mineral exploration programmes that might be of use to investors, but which do not form part of a declaration of Mineral Resources or Ore Reserves.
FAIG	Fellow of the Australian Institute of Geoscientists
g/t	grams per tonne
GPS	Global positioning system
Greentech	Greentech Minerals Limited
Hetherington	Hetherington Exploration & Mining Title Services (QLD) Pty Ltd
HPQ	High purity quartz
ICP	Inductively coupled plasma
IGR	Independent Geologist Report
IPO	Initial Public Offering
Jiangsu	Jiangsu YangShan Silicon Materials Technology Co. Ltd
JORC	Joint Ore Reserves Committee
JORC Code	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 edition, effective December 2012
kt	thousand tonnes
k	thousand
kg	kilogram(s)
km	kilometre(s)
km ²	square kilometre(s)
m	metre(s)
M	Million
MAIG	Member of the Australian Institute of Geoscientists
MEM	Millungera Energy Minerals Pty Ltd
Mineral Resource (as defined by the JORC Code)	A concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known,

Term	Description
	estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
ML	Mining lease
mm	millimetre(s)
Modifying Factors (as defined by the JORC Code)	Considerations used to convert Mineral Resources to Ore Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social, and governmental factors.
Multimines	Multimines Pty Ltd
MS	Mass spectrometry
Nova	Nova Strategic Minerals Pty Ltd
Ore Reserve (as defined by the JORC Code)	The economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at prefeasibility or feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable and Proved Ore Reserves.
Project	The company's Queensland mineral assets
ppb	parts per billion
ppm	Parts per million
Practitioner (as defined by the VALMIN Code)	Expert as defined in the Corporations Act, who prepares a public report on a technical assessment or valuation report for mineral assets. This collective term includes Specialists and Securities Experts.
Qld	Queensland
RC	reverse circulation
REE	Rare earth elements
ROM	ROM Resources Pty Ltd
RTP	Reduced-to-pole
Sinoquartz	Sinoquartz Tech (Lianyungang) Co. Ltd
Specialist (as defined by the VALMIN Code)	Persons whose profession, reputation or relevant industry experience in a technical discipline (such as geology, mine engineering or metallurgy) provides them with the authority to assess or value mineral assets.
t	tonne(s)
Tenements	The company's Queensland mineral assets
Tomra	Tomra Sorting GmbH
tpa	tonnes per annum
VALMIN Code	Australasian Code for Public Reporting of Technical Assessments and Valuations of Mineral Assets, 2015 edition, effective January 2016
>	greater than
<	less than
%	percent



EPM 25894 MAY DOWNS QUARTZ 2022 RESOURCE ESTIMATE REPORT



28th October 2022

ANNEXURE B. TENEMENT MANAGEMENT REPORT



Exploration & Mining Title Services (QLD) Pty Ltd
hetherington.net.au

GREENTECH MINERALS LIMITED
INDEPENDENT TENEMENT REPORT
QUEENSLAND MINING TENEMENTS

September 2022

1. INTRODUCTION

1.1 Scope of Instructions

Hetherington Exploration & Mining Title Services (QLD) Pty Ltd ("HEMTS (QLD)") has been instructed by Greentech Minerals Limited ("Greentech") to prepare a Tenement Report ("Report") regarding the rights conferred by the exploration and mining resource authorities held by Greentech and Millungera Energy Minerals Pty Ltd ("Millungera") in Queensland, as set out in the attached Schedule ("the Schedule").

1.2 Qualifications

Brian Martin has approximately 35 years' experience in exploration and mining tenement management across Queensland.

1.3 Independence

HEMTS (QLD) is independent from Greentech within the meaning of the VALMIN Code. HEMTS (QLD)'s costs of preparing this report have been calculated at its normal charge out rate.

1.4 Disclaimer

This report represents the opinion of HEMTS (QLD) only. Much of the information from the Queensland Department of Resources (DOR), the Queensland Department of Environment and Science (DES) and the National Native Title Tribunal (NNTT) has been obtained from databases or searches provided by the relevant entity. This report is subject to the proviso that these databases/searches may contain errors and are not always reliable. Where possible, the information obtained has been verified against other available information.

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2. COMMENTARY ON THE TENEMENTS

2.1 General

The exploration resource authorities are comprised of Exploration Permit for Minerals (“EPM”) No’s 19373 (“EPM 19373”), 25894 (“EPM 25894”), 26051 (“EPM 26051”) and 27457 (“EPM 27457”) collectively referred to as “the Queensland Exploration Permits”.

Basic details of the Queensland Exploration Permits are set out in the Schedule.

The mining resource authorities are comprised of Mining Lease (“ML”) No 100124 (“ML 100124”) referred to as “the Queensland Mining Lease”.

Basic details of the Queensland Mining Lease are set out in the Schedule.

EPM’s 19373, 26051 and 27457 have been granted to Greentech Minerals Limited as the registered holder of the legal interest pursuant to the terms of the *Mineral Resources Act 1989* (Qld) (“the MRA”). EPM 25894 and ML 100124 have been granted to Millungera Energy Minerals Pty Ltd as the registered holder of the legal interest pursuant to the terms of the MRA.

Granted resource authorities comprise EPM’s 19373, 25894, 26051 and 27457 and ML 100124.

EPM 19373 is due to expire on 12-12-2025. An application to renew the resource authority for a further term should be lodged with DOR by 12-09-2025.

EPM 25894 is due to expire on 14-10-2025. An application to renew the resource authority for a further term should be lodged with DOR by 14-07-2025.

EPM 26051 is due to expire on 21-05-2027. An application to renew the resource authority for a further term should be lodged with DOR by 21-02-2027.

EPM 27457 is due to expire on 27-09-2025. An application to renew the resource authority for a further term should be lodged with DOR by 27-06-2025.

ML 100124 is due to expire on 31-08-2024. An application to renew the resource authority for a further term should be lodged with DOR by 28-02-2024.

The Queensland Exploration Permits referred to in the Schedule have been granted in respect of all minerals, other than coal.

The Queensland Mining Lease referred to in the Schedule has been granted in respect of the mineral quartz/quartzite/silica.

2.2 Exclusion/Restrictions

Non-Native Title land relates to land tenures within the Queensland Exploration Permits and the Queensland Mining Lease where Native Title rights have been extinguished. Native Title land refers to background land tenures where Native Title rights may not have been extinguished.

The Queensland Exploration Permits and the Queensland Mining Lease have been granted, after having regard to the requirements of the *Native Title Act 1993* (Cth) (“the NTA”), in respect of both Native Title land and Non-Native Title land.

Reference to Table 1 below indicates that sections of the Queensland Exploration Permits and the Queensland Mining Lease will be subject to certain restrictions. The specific impacts of the restrictions are detailed in the following paragraphs.

Table 1: Exclusions/Restrictions – Queensland Exploration Permits and Queensland Mining Leases

Tenement	MRA Overlaps & Exclusions/Restrictions	EPA Exclusions or Restrictions
EPM 19373	-	-
EPM 25894	ML 100124 (2%) RA 252 (3%)	Category B - ERE (5%)
EPM 26051	ML 8058 (2%) RA 253 (3%)	Category B - ERE (3%)
EPM 27457	-	Category B - ERE (3%)
ML 100124	-	-

Abbreviations:

- **ERE:** Endangered Regional Ecosystem
- **ML:** Mining Lease
- **RA:** Restricted Area

Endangered Regional Ecosystem (“ERE”)

An ERE is classified as Environmentally Sensitive Area (“ESA”) under the *Environmental Protection Act 1994* (Qld) (“EPA”) and is therefore subject to additional protection strategies under the EPA. An ERE is classified as a Category B ESA. Reference should be made to Section 3.8 of the Report for details of the impact ERE’s may have on the proposed exploration activities within these areas.

Mining Lease (“ML”)

Any ML that was in existence at the time an EPM was applied for is excluded from the area contained in the relevant EPM application in accordance with the provisions of Section 132 of the MRA. EPM 26051 contained an existing ML at the time the relevant EPM application was applied for and therefore this ML was excluded from the EPM grant. The application for ML 100124 used EPM 25894 as the pre-requisite tenure for the ML application. Upon grant of ML 100124, the area of the ML was excluded from the area subject to EPM 25894.

Restricted Area 252 (“RA 252”)

RA 252 is a restricted area covering the Slaughter Yard Creek gem site. The area of RA 252 (i.e., approximately 3%) has been excluded from the area contained in the grant of EPM 25894.

Restricted Area 253 (“RA 253”)

RA 253 is a restricted area covering the May Downs fossil site. The area of RA 253 (i.e., approximately 3%) has been excluded from the area contained in the grant of EPM 26051.

2.3 EPM Conditions

The following conditions apply to the Queensland Exploration Permits:

- General Conditions;
- Specific Conditions
- Conditions of the relevant Environmental Authority (“EA”) (see Section 2.6).
- Conditions of the relevant Native Title requirements (see Section 2.5).

The General Conditions set out the obligations and procedures with which the holder of the Queensland Exploration Permits must comply when conducting exploration activities. These conditions address issues such as notification of landowners and compensation requirements before commencing advanced exploration activities.

The Specific Conditions require the holder of the Queensland Exploration Permits to follow specific programs of works and expenditure commitments outlined in the terms of grant. The current annual

expenditure commitments (where applicable) for the Queensland Exploration Permits are listed in the Schedule.

The conditions of the relevant EA issued in respect to each of the granted Queensland Exploration Permits (see Section 2.6) form part of the relevant conditions of grant. It is a condition of the EA that the holder of the EPM complies with all conditions contained in the Code of Environmental Compliance for Exploration and Mineral Development Projects – Version 1.1, now referred to as the Eligibility Criteria and Standard Conditions for Exploration and Mineral Development Projects – Version 2 (“the EPM Environmental Code”).

Comments on the Native Title requirements for each of the Queensland Exploration Permits are set out in Section 2.5.

2.4 ML Conditions

The following conditions apply to the Queensland Mining Lease:

- General Conditions;
- Specific Conditions (if applicable)
- Conditions of the relevant EA (see Section 2.6).
- Conditions of the relevant Native Title requirements (see Section 2.5).

The General Conditions set out the obligations and procedures with which the holder of the Queensland Mining Lease must comply when conducting mining activities. These conditions address issues such as the requirement to pay rent and royalties to the relevant government authority.

Searches conducted indicate that no Specific Conditions have been applied to the grant of ML 100124.

The conditions of the relevant EA issued in respect to ML 100124 (see Section 2.6) forms part of the relevant conditions of grant. It is a condition of the EA that the holder of the ML complies with all conditions contained in the Code of Environmental Compliance for Mining Lease Projects – Version 2 (ML Environmental Code), along with the additional variation conditions as listed in the EA.

Comments on the Native Title requirements for the Queensland Mining Lease are set out in Section 2.5.

2.5 Native Title

The Queensland Exploration Permits and the Queensland Mining Lease have been granted over both Native Title land and Non-Native Title land. Where noted below, the holder must comply with all relevant Native Title conditions when conducting exploration and/or mining activities on any Native Title land within the Queensland Exploration Tenements and the Queensland Mining Lease.

Table 2 provides a summary for the current Native Title status for the Queensland Exploration Permits and the Queensland Mining Lease. Reference should be made to the following paragraphs for details of the various Native Title categories and how each of these categories will affect exploration/mining activities on the relevant EPM or ML.

Table 2 – Native Title Summary – Queensland Exploration Permits and Queensland Mining Leases

EPM number	Native Title Category	Native Title Party
EPM 19373	NTPCs	QCD 2011/007 (100%)
EPM 25894	Section 31 Deed	QCD 2011/007 (60%), no native title claim (40%)
EPM 26051	Section 31 Deed	QCD 2011/007 (100%)
EPM 27457	NTPCs	QCD 2011/007 (60%), QCD 2012/015 (25%), no native title claim (15%)
ML 100124	Section 31 Deed	QCD 2011/007 (100%)

QCD 2011/007 – Kalkadoon Native Title Aboriginal Corporation RTNBC (determined native title claim).

QCD 2012/015 Indjalandji-Dhidhanu Aboriginal Corporation RTNBC (determined native title claim).

Native Title Protection Conditions (NTPCs)

The grant of EPMs 19373 and 27457 are subject to compliance with the NTPCs.

The NTPCs require the holder to serve a copy of the proposed program of works on any registered or determined Native Title claimant(s) before commencing those exploration activities. The registered/determined Native Title claimant(s) are entitled to a period to review the program of works. If the Native Title claimant(s) do not have any amendments to the program of works and do not require a site clearance to be conducted, exploration can commence without delay. Where a site clearance is required for the proposed exploration sites, one must be completed, and the subsequent exploration activities must be undertaken in accordance with any recommendations made in the subsequent site clearance report.

The NTPCs detail annual payments (administrative payments) payable to the registered/determined claimant(s) and costs associated with site clearances and other matters.

Section 31 Deed

The grant of EPM 25894, EPM 26051 and ML 100124 are subject to compliance with all terms and conditions of the individual Section 31 Deed and the associated Exploration/Mining agreements the resource authority holder negotiated with the relevant native title party prior to the grant of the relevant EPM or ML.

2.6 Environmental Authorities

EPM 19373 has been issued with a Code Compliant EA (referred to as EPSX00801413), which requires the tenement holder to comply with all terms and conditions of the EPM Environmental Code when conducting exploration activities under the authority of EPM 19373.

EPM 25894 has been issued with a Code Compliant EA (referred to as EPSX03019915), which requires the tenement holder to comply with all terms and conditions of the EPM Environmental Code when conducting exploration activities under the authority of EPM 25894.

EPMs 26051 and 27457 have been issued with a Code Compliant EA (referred to as EPSX03506515), which requires the tenement holder to comply with all terms and conditions of the EPM Environmental Code when conducting exploration activities under the authority of EPMs 26051 and 27457.

ML 100124 has been issued with a Code Compliant (variation) EA (referred to as BRMN0028), which requires the tenement holder to comply with all terms and conditions of the ML Environmental Code

when conducting mining activities under the authority of ML 100124. As the EA is a variation EA, the permit holder is required to comply with additional conditions to allow mining activities to be conducted within one kilometre of a Category B ESA.

Prior to conducting any mining or exploration activities under the authority of an EA issued for an EPM or ML, there is a requirement for the EA holder to lodge an appropriate Surety with the Department of Treasury (Treasury). Details of the Surety currently held by Treasury against the relevant EA are provided in the Schedule.

The EPM Environmental Code imposes various exclusion zones around Category A and Category B ESAs within which exploration activities involving the use of machinery cannot be performed (1000 metres for Category A and 500 metres for Category B). No exploration activities (of any nature) can be conducted within Category A ESAs, however if the EA was amended, certain activities might be permitted within Category B ESAs or within the exclusion zones around Category A ESAs and Category B ESAs. The EPM Environmental Code also refers to Category C ESAs within which exploration activities cannot be performed unless the holder has obtained consent from the relevant administrative authority.

None of the Queensland Exploration Permits currently include any Category A or Category C ESAs and therefore no such restrictions currently apply. EPM 25894, EPM 26051 and EPM 27457 contain some Category B, ERE areas. No exploration activities involving the use of machinery can be conducted within the boundary of the relevant ERE or within 500 metres of the ERE boundary unless the EA holder makes application to DES to amend the current EA to remove this restriction. Should such an application be made, it is likely to result in compliance with additional conditions when conducting exploration activities within these restricted areas.

The ML Environmental Code imposes various exclusion zones around Category A and Category B ESAs within which mining activities involving the use of machinery cannot be performed (2000 metres for Category A and 1000 metres for Category B). No mining activities (of any nature) can be conducted within Category A ESAs, however if the EA was modified, certain activities might be permitted within Category B ESAs or within the exclusion zones around Category A ESAs and Category B ESAs. The ML Environmental Code also refers to Category C ESAs within which mining activities cannot be performed, unless the holder has obtained consent from the relevant administrative authority.

The Queensland Mining Lease does not currently include any Category A, Category B or Category C ESAs within the relevant ML boundary. ML 100124 does have a Category B ERE located just outside its boundary, however, the EA has been varied such that the standard 1000m buffer has been reduced to 50m to allow mining activities to occur up to the ML boundary closest to the relevant ERE. As such, no Category A or C ESA restrictions apply to ML 100124. Some additional conditions have been added to BRMN0028 that must be complied with when conducting mining activities on ML 100124. These additional conditions have been imposed to minimise any adverse impact on the nearby ERE.

2.7 Expenditure and Reporting Requirements

It is a condition of the granted Queensland Exploration Permits that the holder complies with the relevant expenditure commitments. The expenditure commitments for the Queensland Exploration Permits are set out in the Schedule.

Annual Activity Reports must be lodged in respect to each granted Queensland Exploration Permit within one month of the anniversary date of grant. A Statement of Expenditure detailing allowable exploration expenditures incurred for the annual period is also due at the same time.

Whenever the holder relinquishes any sub-blocks from an EPM, they are required to lodge a Relinquishment Report. This report is due for submission within 2 months of DOR accepting the relinquishment.

Compliance with the reporting requirements and expenditure commitments of the Queensland Exploration Permits is important because these matters are considered by DOR when determining whether to renew the Queensland Exploration Tenements. Further, compliance with such requirements and commitments may also affect DOR's decision to renew the Queensland Exploration Permits in full, or to require a reduction in area. Non-compliance with these conditions could also give rise to "show cause" action which may lead to termination of the relevant Queensland Exploration Permit by DOR.

There are no outstanding expenditure or reporting requirements for the Queensland Exploration Permits as at the date of this report.

There are currently no expenditure or reporting requirements for the Queensland Mining Lease.

2.8 Access and Compensation

Queensland Exploration Permits

In accordance with the land access requirements of the MRA and the Mineral and Energy Resources (Common Provisions) Act 2014 ("MERCPC"), an Initial Notice of Intention of Entry to conduct preliminary activities must be served on each affected landowner at least 10 business days prior to the intended entry onto the relevant Queensland Exploration Permit. If advanced activities (that is, high impact exploration activities) are to be carried out, a Conduct and Compensation Agreement ("CCA") must be entered into. The period to negotiate a CCA can take up to 50 business days, with an automatic referral to the Land Court, if an agreement is not reached.

Queensland Mining Lease

Prior to the grant of the relevant Queensland Mining Lease, the holder was required to negotiate a Compensation Agreement with all background landowners. Compliance with all terms and conditions of the negotiated Compensation Agreements is a standard condition of the relevant ML.

2.9 Rent

Upon grant, the holder of the Queensland Exploration Permits and the Queensland Mining Leases is required to make annual rental payments to DOR in respect to the retained area of the relevant Queensland Exploration Permit or Queensland Mining Lease.

The rate of rental is subject to annual increases commensurate with appropriate price indices. The last rent increase was 1 September 2022. The current rent rate (exclusive of GST) for EPM's is \$171.89 per sub-block. The current rent rate (exclusive of GST) for ML's is \$66.42 per hectare. (Schedule 5 Mineral Resources Regulation 2013 (QLD)).

As at the date of preparing this report, there are no outstanding rental payments in respect to the Queensland Exploration Permits or the Queensland Mining Lease.

2.10 Encumbrances

Sections 25 and 33 of MERCPC deals with recording of caveats, agreements, arrangements, dealings or interests in the Queensland Exploration Permits and the Queensland Mining Leases and provides that an agreement, arrangement, dealing or interest recorded under Section 33 shall, subject to being otherwise legally enforceable, take priority over other unrecorded or any subsequently recorded agreement, arrangement, dealing or interest. The registration of a caveat against an EPM or an ML under Section 25 of the MERCPC would be to prevent the registration of the assignment of any recorded interest in the relevant permit unless the caveator provides written consent to said assignment.

A consent caveat is currently recorded against EPM 25894. The caveator is Greentech Minerals Ltd. The registered dealing number is 158599. As this is a consent caveat, it will remain in place until the

caveat is removed by the caveator. The effect of the caveat will be to stop the registration of any mortgage or transfer of an interest in EPM 25894, unless the caveator provides written consent to the relevant dealing.

Other than the caveat detailed above, there are no caveats, agreements or arrangements currently registered against any of the Queensland Exploration Permits or the Queensland Mining Lease.

2.11 Royalties

No Annual Royalty Returns or associated royalty payments are required in respect of the Queensland Exploration Permits unless mineral production has occurred. In the case of standard exploration activities conducted on the Queensland Exploration Permits, this is unlikely.

There are no outstanding royalty returns or associated royalty payments outstanding in respect of the Queensland Mining Lease.

2.12 Aboriginal Cultural Heritage

The activities conducted under the authority of the Queensland Exploration Permits and the Queensland Mining Leases are required to comply with the *Aboriginal Cultural Heritage Act 2003* (Qld).

The *Aboriginal Cultural Heritage Act 2003* (Qld) provides that there exists a “cultural heritage duty of care” and, therefore, all reasonable and practicable measures must be taken to ensure that Aboriginal cultural heritage is not harmed (see section 23 of that Act). The “Cultural Heritage Duty of Care Guidelines”, published by Gazette on 16 April 2004, outline how the cultural heritage duty of care requirement is met.

If a breach of the cultural heritage duty of care is demonstrated, the maximum penalties are \$750,000 for a corporation and \$75,000 for an individual.

It is recommended that an assessment of any proposed exploration activity be compared against the “Cultural Heritage Duty of Care Guidelines” (Duty of Care) in order to determine whether, or to what extent, Aboriginal cultural heritage may be affected by the activity. It is also recommended that a search of the Cultural Heritage Register and Cultural Heritage database be conducted prior to commencement of exploration activities.

All the Queensland Exploration Permits are subject to the either the NTPCs or a negotiated agreement. If the resource authority holder complies with all conditions of the NTPCs or the negotiated agreement (as applicable), when conducting exploration activities within the relevant EPM, they would generally have complied with their Cultural Heritage Duty of Care requirements. This would include determining the Aboriginal Party to deal with in respect of the sections of the Queensland Exploration Permits that are not currently covered by an application for a Native Title claim or by a determined Native Title claim and invoking the NTPC conditions over these areas, with agreement by the relevant Aboriginal Party.

ML 100124 has been granted subject to a separate Section 31 Deed and ancillary agreement between the ML holder and the Kalkadoon Native Title Aboriginal Corporation RTNBC. While an initial review of these agreements did not identify any specific reference to compliance with the Duty of Care requirements, it is assumed that compliance with the relevant negotiated agreement will ensure compliance. This matter should be examined further by an appropriately qualified person to ensure compliance with the Duty of Care criteria.

2.13 Future Obligations

Rehabilitation of any current and future exploration and/or mining disturbances under the authority of the Queensland Exploration Permits or the Queensland Mining Lease will be necessary, and the relevant requirements are detailed in the EPM Environmental Code and the ML Environmental Code.

The activities conducted under the authority of the Queensland Exploration Permits and the Queensland Mining Lease are likely to result in the creation of environmental liabilities for the holders. The environmental liabilities will commence when exploration/mining causes an on-ground disturbance. When any disturbed area has been satisfactorily rehabilitated, the environmental liability in respect to that disturbance will cease.

If exploration or mining is conducted on Native Title land, additional costs in respect to Native Title consultation, negotiation and cultural heritage site clearances would be anticipated.

Rental as outlined in the report is payable annually on the anniversary of grant of each of the EPM's. Annual rental payments for ML's are due to be paid to DOR by 1 September each year in advance.

The MRA requires the holder of the granted Queensland Exploration Permits to periodically reduce the area of each of the granted EPM's. Reference should be made to the Schedule for details of the reduction requirements that are applicable to the Queensland Exploration Permits.

There are no such reduction requirements for the Queensland Mining Leases.

Brian Martin
Director,
Hetherington Exploration & Mining Title Services (QLD) Pty Ltd
26 September 2022

SCHEDULE

TENEMENT	PROJECT	STATE	REGISTERED HOLDER	GRANT DATE	EXPIRY DATE	STATUS	AREA (Sub-blocks)	SECURITY		EXPENDITURE COMMITMENT (PA)	RENT (CURRENT YEAR INCLUDING GST)	MINERALS
								SURETY	SECURITY			
EPM 19373	Mark 2	QLD	Greentech Minerals Ltd (100%)	13-12-2012	12-12-2025	Granted	Yr 1 - 11 Yr 2 - 11 Yr 3 - 11 Yr 4 - 11 Yr 5 - 11 Yr 6 - 7 Yr 7 - 7 Yr 8 - 7 Yr 9 - 7 Yr 10 - 7 Yr 11 - 7 Yr 12 - 7 Yr 13 - 7 (Note 1)	\$2,500 (Note 2)	\$500	Yr 1: \$11,000 Yr 2: \$15,000 Yr 3: \$15,000 Yr 4: \$15,000 Yr 5: \$15,000 Yr 6: \$15,000 Yr 7: \$15,000 Yr 8: \$15,000 Yr 9: \$5,000 Yr 10: \$32,000 Yr 11: \$45,000 Yr 12: \$101,000 Yr 13: \$92,500	\$1,203.23	All minerals except coal
EPM 25894	May Downs	QLD	Milungera Energy Minerals Pty Ltd (100%)	15-10-2015	14-10-2025	Granted	Yr 1 - 85 Yr 2 - 85 Yr 3 - 85 Yr 4 - 51 Yr 5 - 51 Yr 6 - 50 Yr 7 - 50 Yr 8 - 50 Yr 9 - 50 Yr 10 - 50 (Note 3)	\$2500 (Note 4)	\$500	Yr 1: \$100,000 Yr 2: \$145,000 Yr 3: \$145,000 Yr 4: \$85,500 Yr 5: \$31,000 Yr 6: \$5,000 Yr 7: \$200,000 Yr 8: \$378,000 Yr 9: \$180,000 Yr 10: \$266,500	\$8,594.50	All minerals except coal

TENEMENT	PROJECT	STATE	REGISTERED HOLDER	GRANT DATE	EXPIRY DATE	STATUS	AREA (Sub-blocks)	SECURITY		EXPENDITURE COMMITMENT (PA)	RENT (CURRENT YEAR INCLUDING GST)	MINERALS
								SURETY	SECURITY			
EPM 26051	Georgina	QLD	Greentech Minerals Ltd (100%)	22-05-2017	21-05-2027	Granted	Yr 1 – 46 Yr 2 – 46 Yr 3 – 46 Yr 4 – 46 Yr 5 – 46 Yr 7 – 46 Yr 8 – 46 Yr 9 – 46 Yr 10 – 46 (Note 5)	\$2,500 (Note 6)	\$500	Yr 1: \$50,000 Yr 2: \$70,000 Yr 3: \$85,000 Yr 4: \$95,000 Yr 5: \$5,000 Yr 6: Note 7 Yr 7: Note 7 Yr 8: Note 7 Yr 9: Note 7 Yr 10: Note 7	\$7,906,94	All minerals except coal
EPM 27457	Kingsley	QLD	Greentech Minerals Ltd (100%)	28-09-2020	27-09-2025	Granted	Yr 1 – 100 Yr 2 – 100 Yr 3 – 100 Yr 4 – 100 Yr 5 – 100 (Note 8)	\$2,500 (Note 6)	\$500	Yr 1: \$5,000 Yr 2: \$145,000 Yr 3: \$185,000 Yr 4: \$85,000 Yr 5: \$175,000	\$17,189.00	All minerals except coal
ML 100124	-	QLD	Millungera Energy Minerals Pty Ltd (100%)	13-08-2019	31-08-2024	Granted	26,28Ha (surface) 26,28Ha (total)	Nil (Note 9)	\$2,500	N/A	\$1,793.34	Quartz

Notes: -

Note 1 – 50% of the area of EPM 19373 is due to be relinquished by 12 November 2025.

Note 2 – EPM 19373 is held under Environmental Authority (EA) number EP SX00801413. An amount of \$2,500 is currently held against this EA. Under this situation the tenement holder is not allowed to disturb any more than 1 Ha at any time across the EPM unless additional security is lodged.

Note 3 – 50% of the area of EPM 25894 is due to be relinquished by 14 September 2025.

Note 4 – EPM 25894 is held under Environmental Authority (EA) number EPSX03019915. An amount of \$2,500 is currently held against this EA. Under this situation the tenement holder is not allowed to disturb any more than 1 Ha at any time across the EPM unless additional security is lodged.

Note 5 – 50% of the current area of EPM 26051 is due to be relinquished by 21 April 2027.

Note 6 – EPMs 26051 and 27457 are held under Environmental Authority (EA) number EPSX03506515. An amount of \$2,500 is currently held against this EA. Under this situation the tenement holder is not allowed to disturb any more than 1 Ha at any time across the EPMs unless additional security is lodged.

Note 7 – An application to renew EPM 26051 for a further term of 5 years was recently granted by DOR. The approved work program for EPM 26051 for the renewal term is 'outcomes based' and therefore there are no specific expenditure commitments for EPM 26051 for the renewal term applies.

Note 8 – 50% of the area of EPM 27457 is due to be relinquished 5 years after grant by 27 August 2025.

Note 9 – ML 100124 is held under Environmental Authority (EA) number BRMN0028. No Surety is currently held against this EA.

ANNEXURE C. RESOURCE ESTIMATE REPORT



**EPM 25894 MAY DOWNS QUARTZ
2022 RESOURCE ESTIMATE REPORT**



28th October 2022



EPM 25894 and ML 100124

MAY DOWNS QUARTZ

2022 RESOURCE ESTIMATE REPORT

for

GREENTECH MINERALS LTD

compiled in accordance with the 2012 Code of the
Joint Ore Reserves Committee (JORC)
of The Australian Institute of Mining and Metallurgy,
Australian Institute of Geoscientists and Minerals Council of Australia

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EXECUTIVE SUMMARY

The May Downs HPQ Project is within the tenements ML100124, EPM 19373, 25894, 26051, and 27457, which are held 100% by Greentech Minerals Limited (GML) except for EPM 25894 and ML100124 which are held by subsidiary company, Millungera Energy Minerals Pty Ltd (MEM). The main objective is exploring for hard rock quartz deposits suitable as an exportable raw feedstock to the High Purity Quartz (HPQ) sand and powder process industry globally. The tenure group is also prospective for copper, gold, vanadium, titanium, phosphate, and rare earth elements.

This report focusses on the geological evaluation, modelling, and resource estimation for EPM 25894 and ML100124 only. The other areas are covered by on-going separate investigations and reporting. This report includes minor updates to some of the text figures and recalculated SiO₂ contents compared to the October 2021 report (Biggs 2021).

The target raw purity for this exportable quartz silica feedstock material (after crushing and optical sorting) is 99.9+% SiO₂ content, which would be improved to >99.99% SiO₂ after beneficiation. Detailed microscopic and SEM testing by the University of New South Wales has shown that a raw quartz sample from May Downs Reef #1 recorded a total of 29.06 ppm of impurities, dominated by Fe (16.5ppm) and Pb (6.12ppm). Greentech has demonstrated that these elements can be removed as per the purification process used by Chinese industrial facility Jiangsu Yangshan. In support, Jiangsu Yangshan processing and laboratories, on a May Downs #2 reef raw sample, also achieved total impurities of just 20.09 ppm.

The forward exploration proposed is seeking not 99.99% grade ore because that is impossible to find insitu, but rather raw quartz assaying >99.9% SiO₂. Enough resources are required to support a mining operation of 20-50,000t per annum.

Whilst the area has been extensively explored over forty-five (45) years for copper, uranium, dimension stone, and lately for vanadium and rare earth elements, no significant exploration for lump quartz had been undertaken prior to 2015. Greentech Minerals Limited has recently investigated copper, titanium, and vanadium occurrences, however, this modelling exercise and resource estimate focuses entirely on the HPQ quartz resources. Since the last quartz model was first generated in May 2016, the following activities have been completed:

- A Mining Lease (ML 100124) has been granted which covers some of the higher-grade quartz reefs.
- Bulk sampling, beneficiation analyses and trials in China of Reefs 1, 2, and 3 have occurred.
- A mapping and rock chip sampling program that included a drone aerial survey of five (5) reefs was completed in May 2019.
- The major reefs have been wireframed with models based on interpretation of the quartz reef HQ diamond drilling on a now relinquished lease also owned by GML (ML 100075 Iceberg Project).
- The 2019 report has been revised in October 2021 consistent with the change in name from Yilgarn Minerals Limited to Greentech Minerals Limited, and a more conservative approach to the reporting of the Inferred Resource.
- The October 2021 report was updated in June 2022 with recalculated SiO₂ % contents (excluding LOI content), some updated maps, and other minor typographic corrections.



The quartz dykes or veins, known as “reefs” or “blows” are en-echelon elongated bodies that intrude the Alpha Centauri Metamorphics, the Guns Knob Granite, and the May Downs Gneiss Complex, and are traceable in stereoscopic satellite imagery with individual strike lengths up to 3,900m. Forty-one (41) reefs have been mapped this way. Sampling across strike has occurred at eleven (11) of the larger reefs and the rock chips subjected to very detailed major oxide and trace element laboratory analyses. The results indicate an average raw SiO₂ content of 99.953% (excluding LOI) across all sampled reefs and major impurities mostly reporting at concentrations of <150ppm. The poorest quality reefs sampled (Reef 3) averaged 99.949 % SiO₂ and the best (Reef 2) 99.964 % SiO₂.

The reefs rise between about 1.5 to 36m above the surrounding flattish plain and although the contacts with the metamorphic rocks are concealed at some of the sites visited, the larger reefs are about 10-20m wide and nearly vertically inclined. Where the quartz extends above the ground surface along the full strike length, this tonnage has been estimated in accordance with the 2012 JORC Code with a total Indicated Quartz Resource of 160,800t (Table 1) and refer to JORC Table 1 (Appendix 1). Measured masks were generated around the bulk sample sites and are surrounded by, but separate from, the Indicated masks. A total of 71,500t of Measured Resources was estimated.

Table 1: Comparison of 2012 JORC Code Resources between 2016-, 2019-, and 2022-Year Tenures

Year	Tenures	No. Reefs	Exploration Target – Low Range	Exploration Target – High Range	Inferred	Indicated	Measured
			1,000t	1,000t	1,000t	1,000t	1,000t
2016	EPM 25894	11	-	-	478	200.8	-
2019	EPM 25894, ML 100124	69	600	1,230	479	160.8	71.5
2021	EPM 25894, ML 100124	41	146	471	155	160.8	71.5
2022	Sub-Totals		146	471	155	160.8	71.5

Notes:

1. Guns Knob Quarry 487.81m² mined out removed.
2. JORC Table 1 has been appended (refer to Appendix 1).
3. See Appendix 2 for detailed resource calculations and Appendix 3 for assay results. All the Exploration Targets have been extended between 3m and 10m below ground.
4. The laboratory air-dried densities were used to calculate gross in-situ tonnes.
5. It should be noted that where Exploration Target tonnages are quoted, they are conceptual in nature and there has been insufficient exploration to define a mineral resource.
6. The Exploration Targets were generated using the same methodology as the Inferred but fell outside wireframes or insufficient sampling was available.
7. For the Exploration Target tonnages, it is uncertain whether further exploration may lead to the reporting of a 2012 JORC Code resource, however the areas are adjacent to or underlying the existing Inferred Resources.

Furthermore, if the reefs are extended to below the ground surface (distance varies per reef between 1-5m), then there is an additional Inferred Quartz Resource of about 155,000t. This resource estimate refers to only those reefs within easy road access, although many more exist in less accessible terrain. Although no drilling has taken place, support for this Inferred resource is provided by bulk trial mining and sampling that excavated quartz that continued down to 3m below the surface



and diamond drilling at a nearby quartz reef (ML100075, at the time, within EPM 19373) where similar quartz reefs were intersected, core sampled and assayed down to as deep as 35m.

An estimate of the remaining forty-one (41) quartz reefs revealed tonnages to the level of an Exploration Target between 0.15 and 0.47Mt of quartz exists within the tenure, but these remain to be thoroughly investigated. Detailed mapping and sampling should confirm these tonnage estimates.

During the previous resource estimation exercise, several sites were nominated for RC or Diamond core drillholes to confirm reef extents to depth. These locations are still recommended for completion.



INTRODUCTION

Yilgarn Minerals Limited has been renamed to Greentech Minerals Ltd. ROM Resources have been requested to review the resource estimate report generated in 2019, as well as rebranding with the latest company details and logo. This includes the downsizing and renewal of the tenure which occurred in late 2019 after the resource estimation was reported. The relinquished sub-blocks were not included in the resource estimation and will therefore have no material effect on the resources estimated in 2019.

LOCATION, ACCESS, AND TOPOGRAPHY

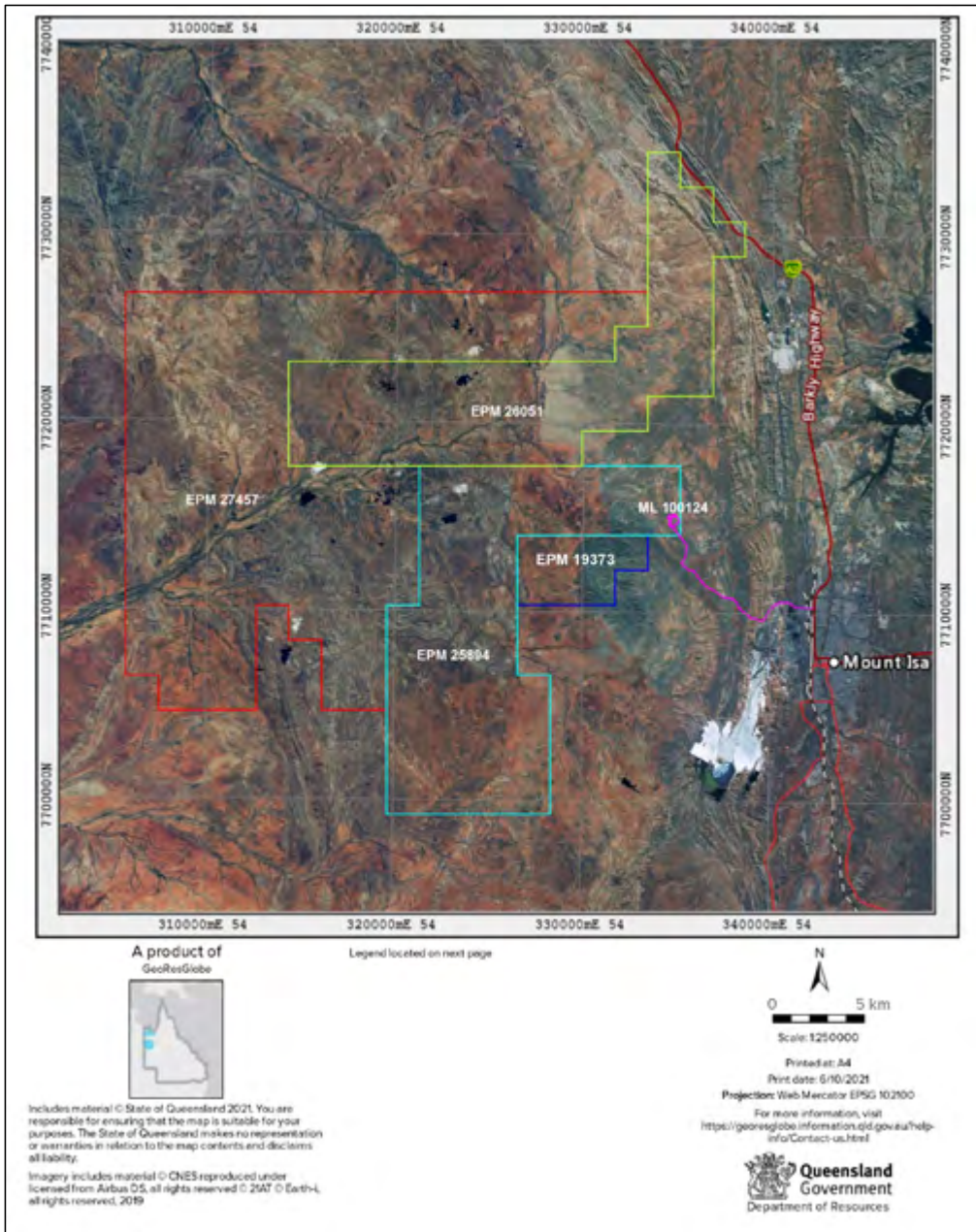
The May Downs Quartz Project is located approximately 10km west of the city of Mt Isa, in northwest Queensland (refer to Figure 1). EPM 25894 extends approximately 24km in a north-south direction and approximately 22km wide. The May Downs Road passes directly through EPM 25894 merging with the Barkly Highway approximately 15km east of the May Downs project. A formed gravel road capable of running triple 'A' haulage trucks runs within 2.2km from the nearest outcrop. The Barkly Highway links the project to the Port of Karumba (possible future bulk export terminal) approximately 350km north of EPM 25894 whilst the Mount Isa Rail line system is the hub for resources loading and transport from this Northwest mineral province to the Port of Townsville where currently most bulk products are exported.

Water supply is fed from two lakes in the area, Lake Moondarra, and Lake Julius, to Mt Isa and surrounding mines as well as several water bores within the tenement.

The climate for the area around the May Downs project is characterised by two distinct seasons – the wet season from December to March and the dry season between June and August. During the wet season the region receives 75% of the annual rainfall amounts that may be less than 250mm in one year and greater than 500mm the following year. The dry season temperatures for the area are described as warm to hot (Bureau of Meteorology, 2019). The area comprises mostly flat-lying gently undulating topography. The tenure is flat lying with clays soils, granite, and quartz outcrops.



Figure 1: May Downs Project Location



TENEMENT DETAILS

CURRENT TENURE

The Exploration Permit for Minerals (EPM 25894) May Downs, is held one hundred percent (100%) by Millungera Energy Minerals Pty Ltd. The permit was granted on the 15th of October 2015 for the term of five (5) years. The tenure covers fifty (50) sub-blocks and a total area of approximately 160.2km². There is a Restricted Area (RA 252) within the tenure. This Designated Fossicking Land restriction partially covers six (6) sub-blocks in the north-east corner of the tenure. The permit allows for exploration activities and studies to be conducted in the tenement area within the limits of the environmental authority (EPSX03019915). Tenement details for the May Downs Project can be seen in Table 2 below.

Mining Lease (ML 100124) is held one hundred percent (100%) by Millungera Energy Minerals Pty Ltd. The lease was granted on the 23rd of February 2018. The lease allows for mining activities to be conducted in the tenement within the limits of the environmental authority (BRMN0028). The tenure covers a total area of 26.3Ha.

TENURE HISTORY

Millungera Energy Minerals Pty Ltd originally applied for EPM 25894 in 2015 and was granted the tenure which originally contained ninety-six (96) sub-blocks. In October 2016 Yilgarn Infrastructure Limited acquired one hundred percent (100%) share of Millungera Energy Minerals Pty Ltd. In 2017, nine (9) sub-blocks were relinquished. In November 2018 Yilgarn Infrastructure Limited changed their name to Yilgarn Minerals Limited. A further thirty-five (35) sub-blocks were relinquished in 2019. In 2020 the tenure was renewed for a further five (5) years and is due to expire on the 14th of October 2025 (Table 2). On the 30th of August 2021 Yilgarn Minerals Limited changed its name to Greentech Minerals Ltd.

Table 2: Tenement Information for EPM 25894

EPM	Permit Status	Lodge Date	Grant Date	Expiry Date	Authorised Holder Name	Sub-block
25894	Granted	22-FEB-2015	15-OCT-2015	14-OCT-2025	MILLUNGERA ENERGY MINERALS PTY LTD	50

SURVEY DATUM

Several deposit specific topographic models were generated from data acquired from:

- Geoscience Australia 1 sec SRTM, accuracy $\pm 4m$ X, Y, 1.5m in Z.
- DJI Phantom 4+ with accuracies varying between ± 0.15 and 1m in X, Y and 0.05 to 0.6m in Z.
- Infill Magellan hand-held GPS traversing as the lowest priority, accuracies in X, Y, and Z $\pm 4m$.

The survey datum used for all modelling is based on Map Grid of Australia (MGA) 94 zone 54 and the height datum is Australian Height Datum (AHD).

For modelling purposes all relevant topographic features with non-current coordinates were converted to Map Grid Australia (MGA94) and Australian Height Datum (AHD) bringing all coordinates into one datum before modelling commenced.



The DTM's for use in reef wireframe modelling were generated using triangulation and grid data loaded to 3D models were generated to cover the Guns Knob and Telegraph Road areas.

DEM 1 SEC SRTM

A topographic model was derived from the Geoscience Australia 1 sec. SRTM smoothed digital elevation model (DEM-S) (A smoothed DEM based on the bare-earth DEM that has been adaptively smoothed to reduce random noise typically associated with the SRTM data in low relief areas (Gallant, et al., 2011)).

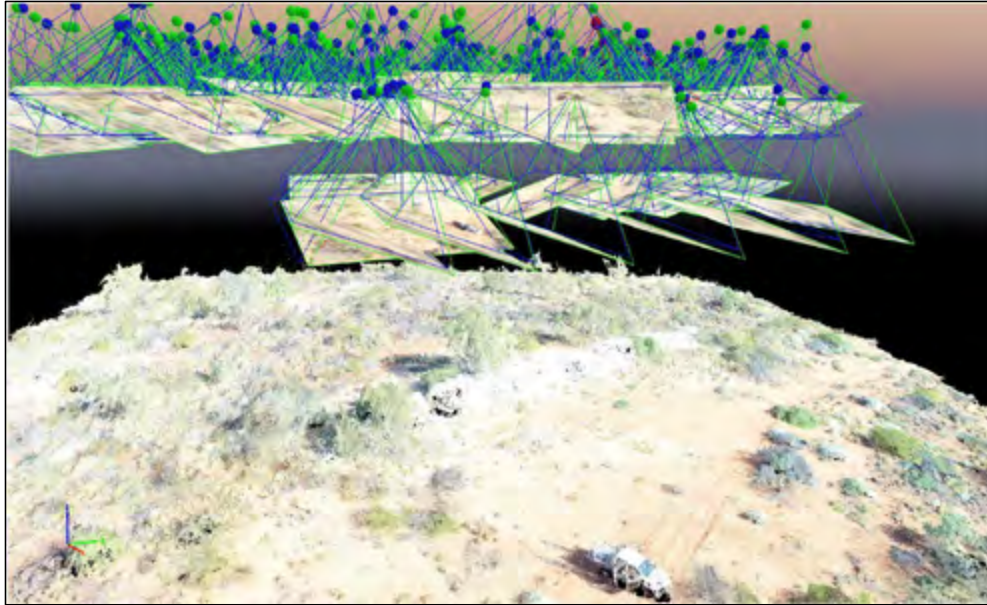
DRONE SURVEY

A DJI Phantom 4 Pro Plus was flown over four (4) reefs in EPM 25894 conducting photogrammetry surveys. Guns Knob was flown with manual control whilst the other three (3) Reefs had flight plans pre-programmed and flown autonomously on a grid pattern. Table 3 below, outlines the various drone grid surveys completed and their accuracies. The data from the survey is then 'stitched' together using mosaic tiles (Figure 2), and a topographic surface is created with output of point cloud data in *.las format, imagery in *.tiff format, and a DTM grid. The data was used to update the local topographic surfaces for the target reefs and for mapping quartz reef extents.

Table 3: May Downs Drone Surveys May 2019

Quartz Body	Mapping and Sampling			No. of Drone Photos	LAS Cloud Points	X Error (m)	Y Error (m)	Z Error (m)	Comments
	Dec 2015	March 2016	May 2019						
Guns Knob	Y	Y	Y	59	1,504,596	-1.37	0.387	0.669	Manual flight plan
Reef 1	Y	Y	Y	264	24,464,111	0.098	0.107	0.116	Drone Grids 1-2
Reef 1A		Y	Y	264	24,464,111	0.098	0.107	0.116	Drone Grids 1-2
Reef 1B		Y	Y	264	24,464,111	0.098	0.107	0.116	Drone Grids 1-2
Reef 1C		Y	N	264	24,464,111	0.098	0.107	0.116	Drone Grids 1-2
Reef 2		Y	Y	420	35,074,707	0.062	0.061	0.049	Drone Grids 1-5
Reef 2A		Y	N	420	35,074,707	0.062	0.061	0.049	Drone Grids 1-5
Reef 2B		Y	N	420	35,074,707	0.062	0.061	0.049	Drone Grids 1-5
Reef 5	Y	N	Y	83	9,934,589	0.109	0.136	0.061	Drone Grid 1
Reef 5A		N	Y	83	9,934,589	0.109	0.136	0.061	Drone Grid 1
Reef 6	Y	N	Y	83	9,934,589	0.109	0.136	0.061	Drone Grid 1

Figure 2: Mosaic Process of Reef 2





GEOLOGICAL SETTINGS

REGIONAL GEOLOGY

The Mount Isa Inlier has a long history of mining and exploration and hosts several major sedimentary-hosted lead - zinc deposits (Mount Isa, Hilton, George Fisher, Century, Cannington) and the Mount Isa copper deposit. Recently there has been general acceptance that granites may be related to mineralisation in this part of the Inlier (e.g. (Wyborn & Heinrich, 1993a) (Wyborn & Heinrich, 1993b)) with the discovery of deposits such as Ernest Henry, Osborne, Eloise and Starra.

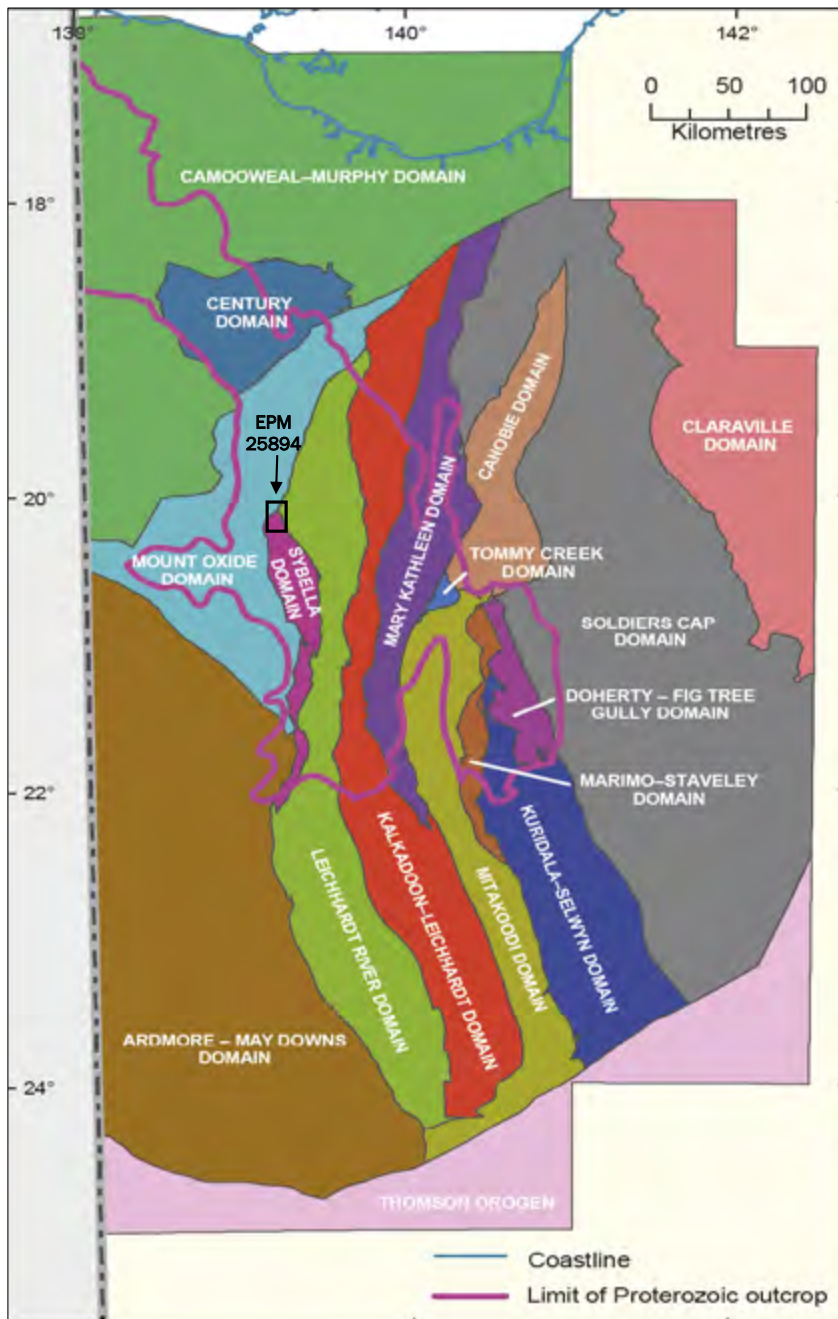
The regional geology of the Mount Isa Inlier was reviewed by (Blake, Geology of the Mount Isa Inlier and environs, Queensland and Northern Territory, 1987) and (Blake & Stewart, 1992), (Withnall & Cranfield, 2013); (Figure 3). The Mount Isa Inlier itself can be subdivided into three broad tectonic divisions: the Western and Eastern Fold Belts separated by the older Kalkadoon-Leichhardt Belt. The Murphy Inlier to the northwest separates the Mount Isa Inlier cover sequences from the McArthur Basin. The oldest sequence in the Mount Isa Inlier, designated by Blake (1987) as basement, consists of a package of predominantly quartzose-feldspathic sedimentary rocks which were deformed and metamorphosed by about 1875 Ma. It was overlain by cover sequences ranging in age from about 1875 Ma to 1580 Ma in the Western and Eastern Fold Belts. The amount of volcanics within these sequences decreases throughout time, and they can be either dominantly felsic, dominantly mafic, or bimodal.

The project area covers part of the Sybella Province in Western Fold Belt of the Mount Isa Inlier (Withnall & Cranfield, 2013). A large part is underlain by the Sybella Granite, which intrudes rocks of the Haslingden Group, (Figure 4) and is thought to have been deposited during a rift-sag fill cycle of events. This group comprises the Mount Guide Quartzite, including the May Downs Gneiss, unconformably overlain by the Eastern Creek Volcanics (locally the Alpha Centauri Metamorphics) which are in turn unconformably overlain by the Myally Subgroup. A Cambrian capping (an outlier of the Georgina Basin) overlies the Sybella Granite in the north-western part of the area while elsewhere, particularly in the north and north-west there is a cover of Cainozoic and Quaternary alluvium.

The Sybella Batholith forms a large north-south elongate zone and covers an area of over 1600km². It is interpreted as an A-type composite granitoid complex, divisible into several phases, intruded during an extensional phase during the development of the Mount Isa Basin (Blake & Stewart, 1992).

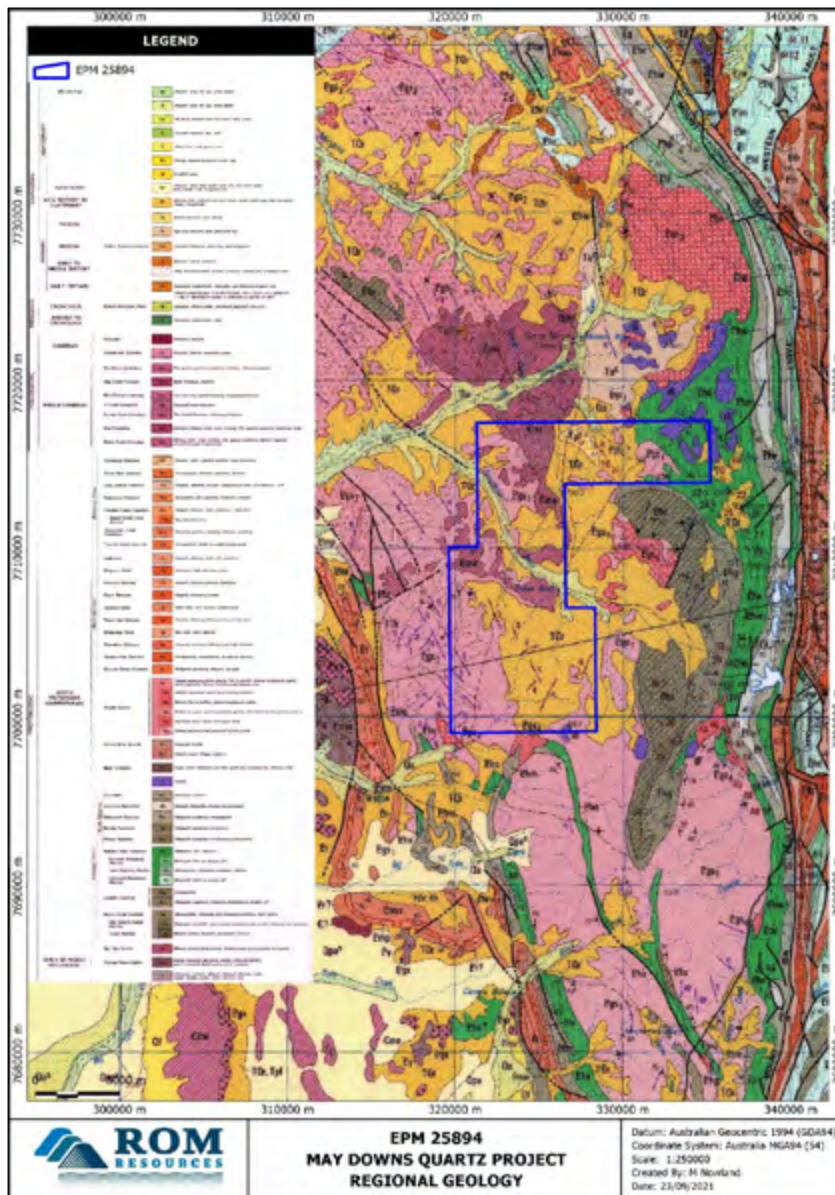
The eastern and northern contacts with the country rocks are of the normal intrusive type and are generally sub parallel to stratigraphy. At least two generations of pegmatites have been identified in the area. Both phases are younger than the Sybella Batholith. West of the Mount Isa Fault the Eastern Creek Volcanics are subdivided into quartzite and metabasalts/amphibolite, and metasediments (predominantly schists and quartzites). Rocks in the area have been multiply deformed, metamorphosed and metasomatised. Metamorphic grades reached upper amphibolite facies with metamorphic grade increasing westwards from the Mount Isa Fault towards the Sybella Granite.

Figure 3: Mt Isa Inlier Regional Framework



Modified after (Withnall & Cranfield, 2013)

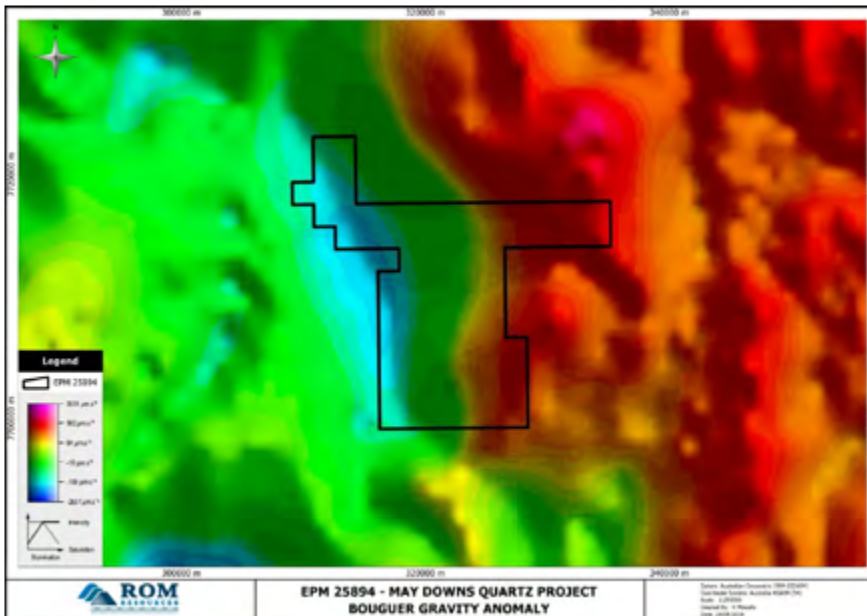
Figure 4: Regional Geology of EPM 25894



Modified after (GSQ, 1987) (GSQ and BMR, 1983).

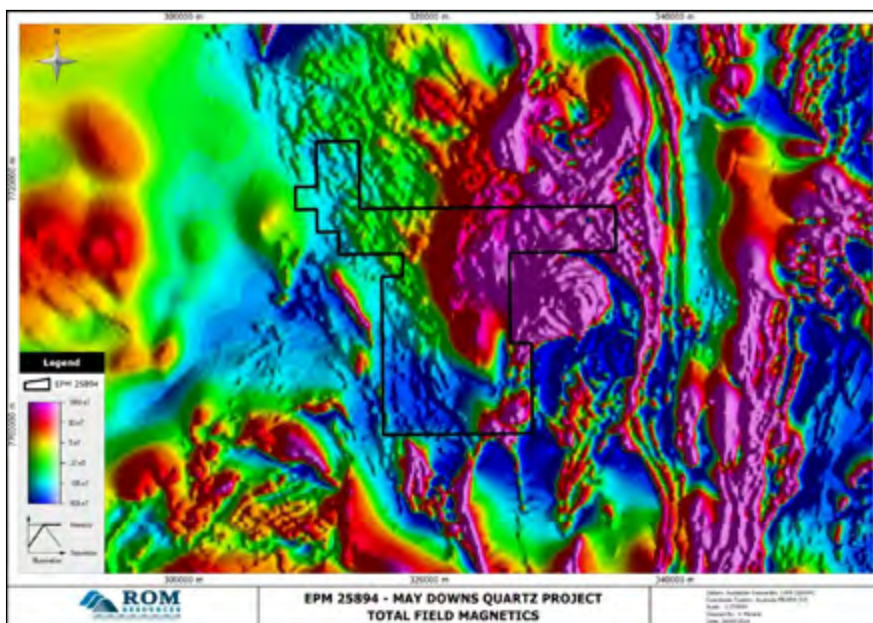
Detailed airborne and ground geophysical surveys such as total field magnetic, bouguer gravity (Figure 5 and Figure 6) Aster mineral mapping and magnetotellurics are available for the project area, and confirm regional mapping, with quartz dykes more prevalent in the east and southwest.

Figure 5: Bouguer Gravity Anomaly Map



Modified after (Bacchin, Milligan, Tracey, & Wynne, 2008)

Figure 6: Total Magnetic Intensity Map



Modified after (Milligan, Franklin, Minty, Richardson, & Percival, 2010)



REGIONAL STRUCTURE

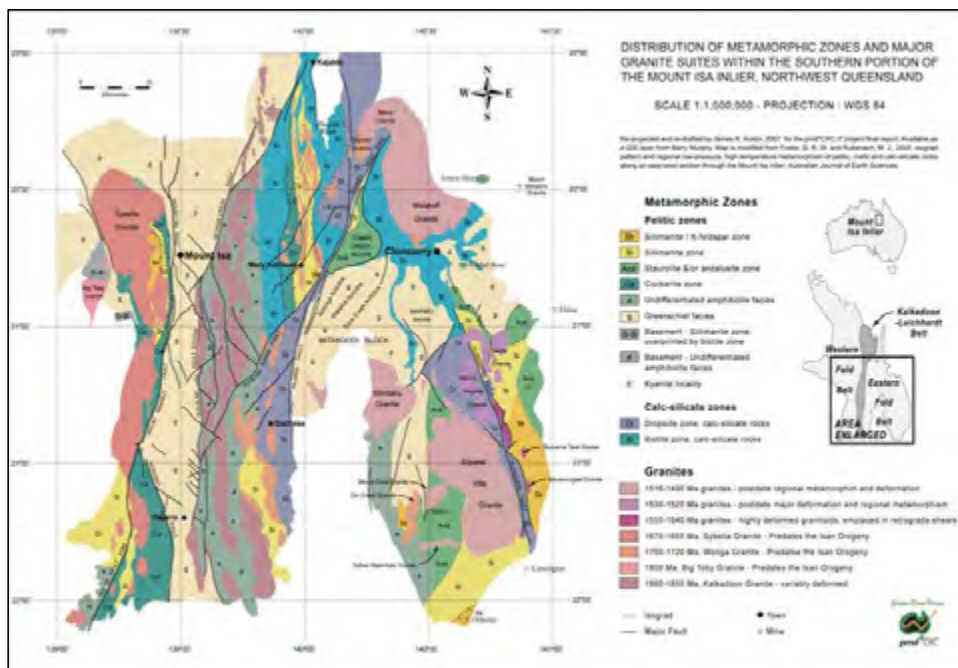
The area is also marked by major fault zones and several periods of faulting, associated with pulses of mineralisation. Major trend directions in the project area are the main north-south trend (Mount Isa Fault), a north-northwest trend and a northeast trend (Figure 7 and Figure 8).

There is some debate over the deformation history of the local area; the main issue being over the existence of a pre-Sybella-age fabric which has resulted in different classifications of the deformation events, (Connors & Page, 1995) (Page & Bell, 1986) and (Connors, et al., 1992). Connors et al (1992) conducted the most detailed study that included the southern part of the Permit area where they defined multiple deformational phases that occurred during metamorphism during the Isa Orogeny (1610-1480 Ma). The deformation phases are:

- D1 folds and cleavages which are rare in the country rocks and do not occur within the granite. S1 is in places parallel to S0.
- D2 folding on all scales and a penetrative S2 cleavage, which is the dominant fabric across the entire Mount Isa Block.
- D3 comprised of initial D3a shearing followed by mesoscopic to megascopic D3b folding which is observed in large scale folds in the southern portion of the batholith.
- D4 and D5 recognised only in the country rocks and not in the batholith.

Quartz veining appears to be related to the D2 event and occurs in country rock and pegmatite. Mapped strikes vary between 310°-345° with dips 55-85° to the west or east.

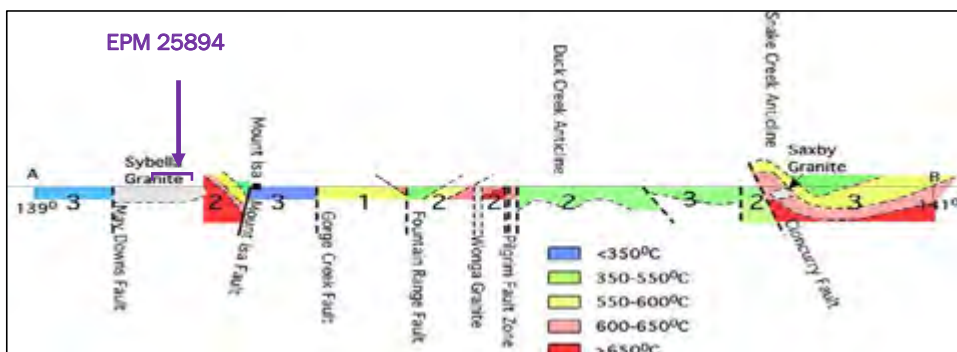
Figure 7: Isograd Map of the Mount Isa Inlier.



Modified after (Foster & Rubenach, 2006)

The section line through Mount Isa (Figure 8) is shown. For convenience cover sequences 1-3 are included rather than the more recent super-basins. The dips of the isograd surfaces are unknown, so are schematic.

Figure 8: NNW-SSE cross section through the Mount Isa Inlier through Mount Isa.



Modified after (Foster & Rubenach, 2006)

LOCAL GEOLOGY

ALPHA CENTAURI METAMORPHICS

The main country rock enclosing the quartz dykes at Telegraph Road are the Proterozoic Alpha Centauri Metamorphics (Jell, 2013), previously assigned to a member in the Mt Guide Quartzite of the Haslingden Group. The formation comprises of layered calc-silicate rocks (phyllites, schists (see Figure 9) and gneisses, fine-grained amphibolite, and quartzite (Geological Survey of Queensland, 2012). It was originally reserved for use in the Mount Isa Inlier (Beeston, 2011). These rocks were previously mapped as Eastern Creek Volcanics and their maximum depositional age is 1789+/-4 Ma (Jell, 2013).

Figure 9: Muscovite Schist at contact of Reef 1



Source: (Biggs, Minialo, & Nowland, 2016)

MAY DOWNS GNEISS

The May Downs Gneiss is high-grade folded gneiss predominantly composed of quartz, plagioclase (microcline), quartz gneiss and schist containing minor biotite, (Figure 10), sillimanite and muscovite. This formation is not a member of the Mount Guide Quartzite (as May Downs Gneiss Member was previously known) although it is probably of equivalent age but is lithologically and geographically distinct. Age is uncertain but reported to be older than Sybella Granite (~1670 Ma). It is thought to be <1789 +/- 4 Ma but may be older. The formation was previously included in the Haslingden Group, but not found in Geology of Queensland (Jell, 2013).

The original rocks were likely a mixed of sedimentary rocks of shales, siltstones, sandstone, and minor quartzite, with interbeds of mafic sills and perhaps mafic flows and some felsic volcanic input. This group of rocks would be like the Soldiers Cap Group in the Eastern Succession, particularly the Toole Creek Volcanics (Johnson, 2003).

Figure 10: Pegmatite with Thick Biotite Leaves - May Downs Gneiss at Guns Knob Quarry



Source: (Biggs, Minaiilo, & Nowland, 2016)

EASTERN VOLCANICS DIORITES

Throughout the Telegraph Road area, low hills have formed on discontinuous outcrops of an unnamed Paleoproterozoic Dolerite formation (MI (do) (Jell, 2013)) consisting of meta-dolerite and meta-gabbro of various ages passing into amphibolite and local biotite or chlorite schist and rare pyroxene-bearing dolerite. The unit hosts no quartz blows, but occasional secondary copper mineralisation coatings were noted in the field (Tedman-Jones, 2018)

QUARTZ DYKES

Telegraph Road

EPM 25894 contains many quartz dykes (blows and reefs) adjacent to the Sybella granite suite and similar-aged metamorphic rocks along the May Downs Road (Figure 11). This quartz was mostly formed by hydrothermal silica fluids pushing through the stress faults and fissures formed in the Sybella granite during this plutonic up-thrust event (Wyborn & Heinrich, 1993b). The high temperature silica fluids cooled into a quartz solid mass over time and most of the non-silica impurities, within the



hot fluids, sweated out into the surrounding granite. Over time weathering then exposed the quartz as prominent reefs or quartz “blows” within the tenement (Figure 12).

The quartz is of a crystalline structure characterised by a vitreous lustre and translucency. Upon close inspection of several rock chip samples from representative outcrops, they appear to contain very few fluid or gas inclusions within the quartz matrix (Figure 13).

Figure 11: EPM 25894 - Location of Quartz Reefs

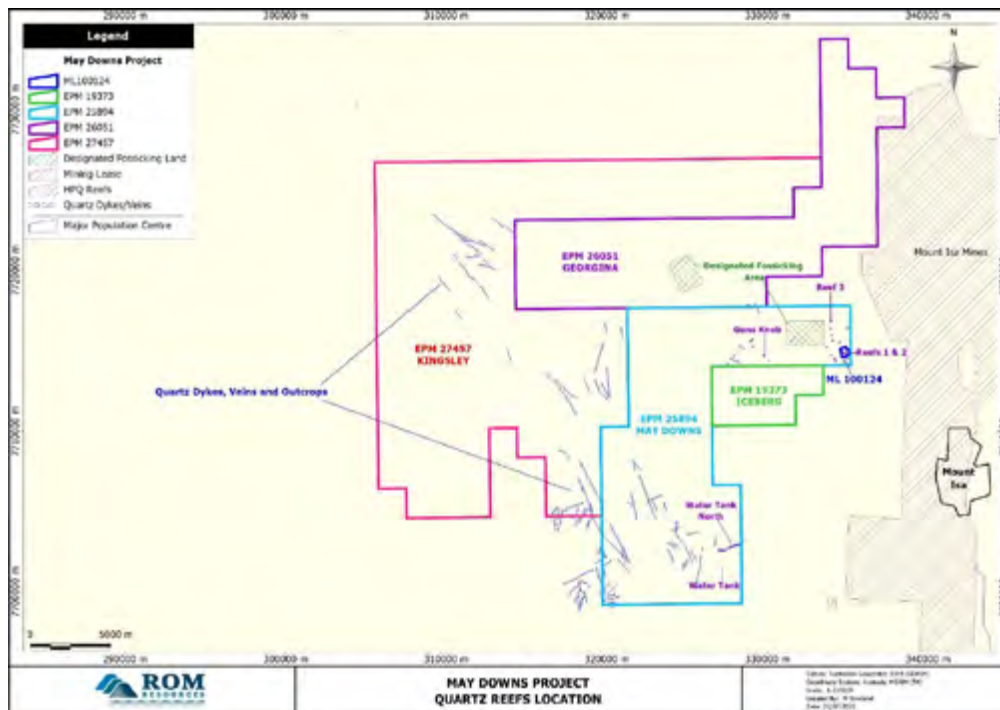


Figure 12: Telegraph Road Reef 3



Source: (Biggs, Miniailo, & Nowland, 2016)

Figure 13: Quartz Samples



Reef No. 3 – Chip Sample

Reef1A – Tourmaline inclusions in Quartz

Source: (Biggs, Miniailo, & Nowland, 2016)

Guns Knob Quarry

At Guns Knob Quarry (Figure 14) the country rock are pegmatites and gneisses of the May Downs Gneiss, and the quartz reef forms a prominent hill some 36m above the surrounding countryside. The quartz dips 55° (degrees) to the west striking 312° (degrees). There is a distinct 20cm band of leaved biotite at the contact (see Figure 14).

Figure 14: Guns Knob Quarry, contact between pegmatite and quartz in the mine-out area

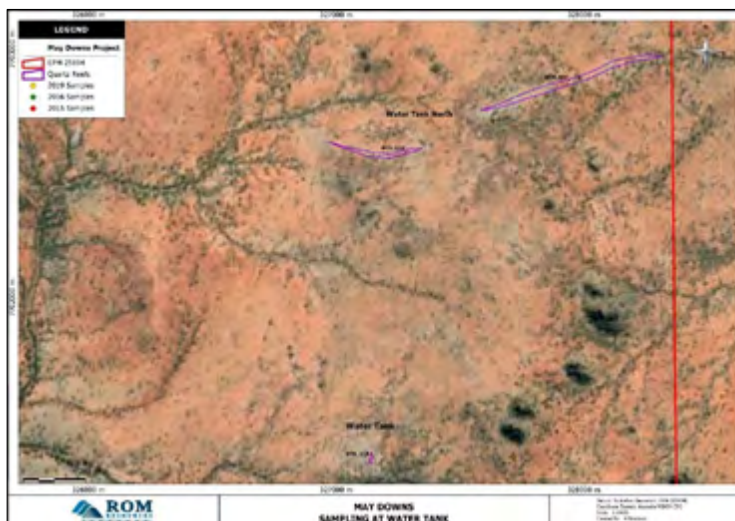


Source: (Biggs, Miniallo, & Nowland, 2016)

Water Tank

The Water Tank Reef complex which consists of two major northeast-trending, wide quartz reefs (Water Tank North) and one north-trending reef some 1,800m south (Water Tank). All were mapped and sampled in 2015 (Pustahya, Dai, & Pustahya, 2015a). The extent of the reefs and the sample locations are shown in Figure 15, which suggests of possible extensions beyond the current mapping.

Figure 15: Water Tank Reefs and Sample Locations



EXPLORATION

PREVIOUS INVESTIGATIONS

The May Downs Project area has been explored sporadically since 1954 when uranium was first discovered, with a focus on a distinct trend of shear-hosted uranium deposits to the east of the project area. Much of all exploration in the region has been for radioactive mineralisation. Several airborne magnetic and radiometric surveys have covered various section of the tenure. Historical exploration involving minor shallow drilling, surface geochemistry and various geophysical surveys was carried out over the mineralised area.

More recently, prospecting activity has been directed towards copper, gold, and rare earth element mineralisation (Withnall & Cranfield, 2013). Several other prospects adjacent to the Sybella Granite have been historically worked for uranium, mica, tin, beryllium, and silica.

The project area has been historically covered by a total of twenty-four (24) Authority to Prospect (ATP) and Exploration Permit for Minerals (EPM), and several small Mining Leases (ML), which were pegged over individual prospects. A summary of the exploration history over EPM 25894 is documented in Table 4. No previous exploration has been undertaken for High Purity Quartz (HPQ) in the area.

Table 4: Summary of Exploration History over the May Downs Area

Year	Prospect	Company	Mineralisation	% Overlap
1961-1970	ATP 333M	Unknown		71
	ATP 415M	Broken Hill South Limited	U	9
	ATP 473M	Queensland Mines Limited	U	84
	ATP 620M	Eastern Copper Mines NL	U, Cu	15
1971-1980	ATP 727M	Pioneer Mining & Exploration Pty Ltd	Au	11
	ATP 967M	Esso Australia Limited	U	5
	ATP 1132M	Exoil NL	Be	5
	ATP 1193M	Savage Exploration Pty Ltd	U	6
	ATP 1443M	Carpentaria Exploration Co Pty Ltd	Cu, Pb, Zn	1
1981-1990	EPM 1975	Urangesellschaft Australia Pty Ltd	U	1
	EPM 4867	Stockdale Prospecting Limited	Au	1
	EPM 5858	Homestake Australia Limited	Au	8
1991-2000	EPM 7674	Eastern Copper Mines NL	Cu-Au	4
	EPM 7866	Granite Resources Limited	Granite	7
	EPM 7966	Dacca Pty Limited	Unknown	5
	EPM 9566	Mount Isa Mines Ltd	Cu, Pb, Zn	5
	EPM 10870	WMC Resources Ltd	Cu	6
2001-2010	EPM 9585	Mount Isa Mines Ltd/Xstrata Copper	Cu	6
	EPM 14368	Universal Resources Limited	Pb, Zn, Cu	61
	EPM 16056	Red Metal Limited	Cu, Au, U	7
After 2010	EPM 11524	Mount Isa Mines Ltd/Xstrata Copper	Cu	1
	EPM 11898	Summit Resources Pty Ltd	Pb, Zn, Cu	21
	EPM 15411	Mount Isa Mines Limited	Cu-Au	2
	EPM 19852	Red Metal Limited		31

Compiled from (Geological Survey of Queensland, 2019)

CURRENT WORK

No drilling for hard rock quartz investigation has been undertaken at May Downs. In the 1970's and 1980's, Guns Knob Quarry quartz was previously mined for road base and by MIM Holdings for flux.

Bulk samples have been taken at Reefs 1 and 2 (inside ML 100124), and Reef 3. The remainder of the rock chip sampling has been spread across various other smaller reefs in the north-eastern section of EPM 25894. Two large reefs in the southeast of EPM 25894, Water Tank North and Water Tank have had three (3) samples taken and analysed in 2015.

Reef 2, Guns Knob, and Water Tank Reefs have been subject to a fluid inclusion study at the UNSW (Ukritnukun, Koshy, & Sorrell, 2017).

In May 2019, some outcrop areas were remapped, with the main quartz reefs better defined, by a drone survey (DJI Phantom 4 Pro+).

SURFACE SAMPLING

In December 2015 surface sampling was undertaken by Millungera Energy Minerals (Pustahya, Dai, & Pustahya, 2015a) to carry out a reconnaissance site visit to Area 1 (Telegraph Road) this included mapping and sampling. Sampling was undertaken using a sledgehammer and approximately 20kg samples were collected.

In 2016 surface mapping and sampling was undertaken with three (3) rock chip samples excavated by geological picks and a small sledgehammer. Approximately 3-5kg of material was collected, mostly in and around sites for later bulk sampling.

In 2019, eleven (11) widely spaced, chip samples were collected from known and several new quartz reefs. The samples were collected using a medium-sized steel sledgehammer. Table 5 and Figures 16, 17 and 18 documents the location of the 2015, 2016 and 2019 rock chip and bulk sampling.

Table 5: Recent Rock Chip Sampling, May Downs Reefs

Sample_ID	Easting	Northing	AHD	Analysis Weight	Date Collected	LOI %	Type
GK01_1601	329807.5	7714655	413	0.45	22/3/16	0.04	Rock chip
QB02_1601	334877.7	7715005	383	0.44	22/3/16	0.05	Rock chip
QB03_1601	333930.2	7716866	274.2	0.21	22/3/16	0.08	Rock chip
94385	329789	7714671	418	1.27	13/5/19	0.04	Rock Chip
94386	329763	7714684	412	1.43	13/5/19	0.07	Rock Chip
94387	334868	7715029	381	1.16	14/5/19	0.07	Rock Chip
94388	334882	7715005	384	0.94	14/5/19	0.05	Rock Chip
94389	334888	7714992	383	1.09	14/5/19	0.06	Rock Chip
94390	334604	7715028	375	0.76	14/5/19	0.08	Rock Chip
94391	334600	7715047	376	0.63	14/5/19	0.05	Rock Chip
94392	334598	7715065	366	1.42	14/5/19	0.01	Rock Chip
94393	334640	7715065	374	0.88	14/5/19	0.06	Rock Chip
94394	334551	7714779	381	0.80	14/5/19	0.05	Rock Chip
94395	334177	7714452	380	0.50	14/5/19	0.06	Rock Chip

Figure 16: Reefs 1, 1A, 2 and 4 Sample Locations



Figure 17: Reef 3 Sample Locations



Figure 18: Guns Knob Quarry Sample Locations



BULK SAMPLING

During March 2016 bulk sampling was conducted at three (3) sites (Reef 1, 2 and 3) at May Downs using a small hydraulic excavator with both a hammer pick and bucket attachments. (Figures 19 and 20).

Figure 19: Bulk Sampling at Reef 2



Figure 20: Sizing of the ROM Quartz at Reef 3



A total of 68t was mined and transferred by truck to the Mt Isa railhead. Details of the sampling are shown below in Table 6.

Table 6: Sample Locations

Site	Sample Id	Easting	Northing	Mass (kg)	Raw SiO ₂ %
Reef 1	BS 1	334603.5	7715049.5	19,660	99.92
Reef 2	BS 2	334876.0	7715012.8	23,000	99.94
Reef 3	BS 3	333930.2	7716866.3	25,760	99.91
				68,420	

Mining took place on the 22nd and-23rd March 2016 and crushed ROM material was transported by train from Mt Isa to Townsville and then by cargo ship to the port of Lianyungang in China for BS1 on the 14th of April 2016 and to Ningbo Port on the 16th of September 2016 for BS2 and BS3 (Figure 21). Testing was conducted at the Tongali (on the 7th of June 2016), and Yangshan Factories (on the 7th of January 2017). The results for ‘as received’ quartz showed very low levels of impurities as shown in Table 7, with the total analyses appended (Appendix 3).

Figure 21: May Downs ROM Quartz Offloaded at Chinese Port



Supplied by Hugh Dai, 2017

Table 7: Selected Trace Element Concentrations for the Raw 2016 Bulk Samples

Sample Site	Al (ppm)	Fe (ppm)	Ca (ppm)	B (ppm)	K (ppm)	Ti (ppm)
BS1	44.7	4.9	11.4	0.20	5.2	8.3
BS2	33.9	2.6	9.1	0.43	4.1	5.8
BS3	38.7	4.4	11.3	0.08	5.5	8.9

SAMPLE ANALYSIS METHOD

AUSTRALIAN TESTING

ALS Laboratories have completed analysis on twenty (20) rock chip samples between 2015-2019. These results have been documented in Appendix 3.

Analyses were completed for total silica (SiO₂), and the major impurities that affect industrial use being aluminum (Al), iron (Fe), titanium (Ti), chromium (Cr), calcium (Ca), potassium (K), magnesium (Mg), manganese (Mn), sodium (Na), phosphorus (P), vanadium (V), zirconium (Zr), lithium (Li), nickel (Ni), barium (Ba), copper (Cu), as well as Loss on Ignition (LOI). ALS used a suite of specialty methods to complete the silica analytical process as follows:

ME-ICP64 METHOD

The ME-ICP64 methodology is:

- 2g of sample is digested with a mixture of HNO₃, HCL and HF.
- The residue leached with 5ml HNO₃ and 10ml HCL; and
- Analysis by ICP-AES.

ME-MS61 METHOD

The ME-MS61 methodology from ALS utilizes a four (4) acid digestion dissolves nearly all minerals in most geological samples. ME-MS61 provides extensive coverage of forty-one (41) trace elements as well as major element proxies for mineralogy using ICP-MS and ICP-AES analysis. ALS highlighted that cobalt (Co) and tungsten (W) are not reported by ME-MS61 as the results are elevated due to contamination by tungsten carbide imparted to the sample during the milling and crushing processes.

CHINESE TESTING

Quartz rock chip and bulk samples sent to China for raw and beneficiation trials were either tested by factory laboratories e.g., Experimental Branch of Jiangsu Yangshan Silicon Materials Technology Co., Ltd., or at the National Silicon Material Deep Processing Product Quality Supervision and Inspection Centre. Laboratory Standards usually quoted are:

- JY/T015 - 1996: General Principles of The Emission Spectroscopic Method of Sensitive Lyonized Plasma Atomic Emission, and.
- SJ3228.4 - 1989: The Determination of Silica in High Purity Quartz Sand.

QAQC

Quality control in laboratory analysis was reported separately by ALS Laboratories and their reports are appended (Appendix 4). Detections of instrument drift and bias was examined through the following methods:

1. Sample Blanks (no material).
2. Certified Standards.
3. Duplicates of samples QB03_1601 and 94394.

This investigation revealed the laboratory methods employed matched the Standards' error bounds and no other abnormal result was obtained with the blank testing or there was little observable variation between duplicates.

DATA SPACING

Data spacing varied from reef to reef. For Water Tank, and Reefs 1A, 4, and 6 only one (1) sample was taken per reef. For the other major reefs sampling is as follows (Table 8):

Table 8: May Downs Major Reef Data Spacing

Reef	No. of Bulk Samples	No. of Rock Chip Samples	RMS Average Spacing (m)
1	1	3	8.9
2	1	5	17.0
3	1	2	10.7
Guns Knob	-	3	15.6

DATA COMPILATION

A detailed discussion of mapping, drilling, sampling, and laboratory analysis techniques undertaken between October 2015 and March 2016 was given in (Biggs, Miniailo, & Nowland, 2016) and is also discussed in Section 1 of JORC Table (Appendix 1). The data has been compiled into a database where it has been checked and validated along with the data collected from the May 2019 program (Table 9).

Table 9: May Downs May 2019 Data Compilation

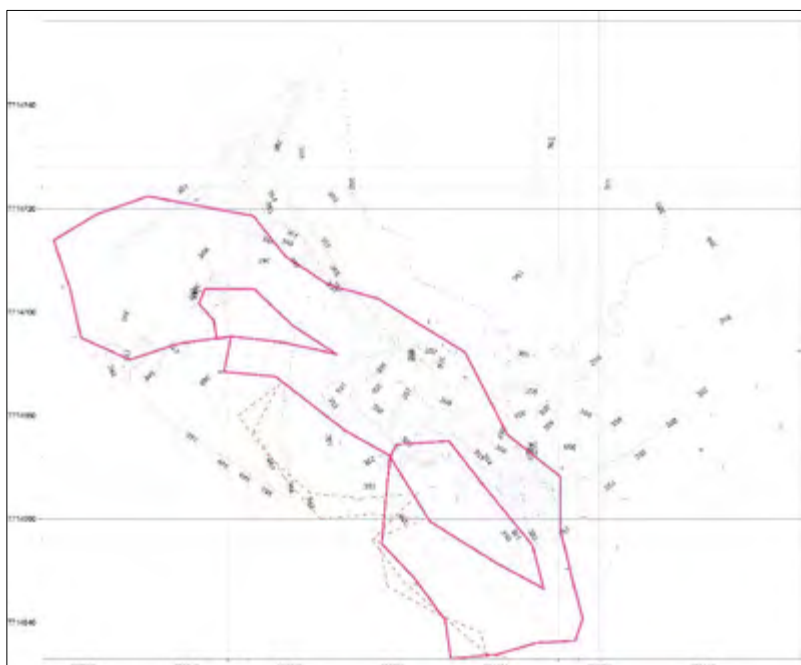
Tenure	Quartz Reef	Mapping & Sampling			Drone Coverage	Drone Photos	LAS Cloud Points	X Error (m)	Y Error (m)	Z Error (m)	Comments
		Dec 2015	Mar 2016	May 2019							
25894	Guns Knob	Y	Y	Y	Y	59	1,504,596	-1.37	0.387	0.669	Manual flight plan; 3 sample analyses
25894	Water Tank North	Y	N	N	N						3 sample analyses
25894	Water Tank	Y	N	N	N						
100124	1	Y	Y	Y	Y	264	24,464,111	0.098	0.107	0.116	Drone Grids 1-2
100124	1A		Y	Y	Y	264	24,464,111	0.098	0.107	0.116	Drone Grids 1-2
100124	1B		Y	Y	Y	264	24,464,111	0.098	0.107	0.116	Drone Grids 1-2
100124	1C		Y	N	Y	264	24,464,111	0.098	0.107	0.116	Drone Grids 1-2
100124	2		Y	Y	Y	420	35,074,707	0.062	0.061	0.049	Drone Grids 1-5
100124	2A		Y	N	Y	420	35,074,707	0.062	0.061	0.049	Drone Grids 1-5
100124	2B		Y	N	Y	420	35,074,707	0.062	0.061	0.049	Drone Grids 1-5
100124	2C		Y	N	N						
25894	3		Y	N	N						
25894	3A		Y	N	N						
25894	4	Y	Y	Y	N						Only partial coverage by drone, but sampled
25894	5	Y	N	Y	Y	83	9,934,589	0.109	0.136	0.061	Drone Grid 1
25894	5A		N	Y	Y	83	9,934,589	0.109	0.136	0.061	Drone Grid 1
25894	6	Y	N	Y	Y	83	9,934,589	0.109	0.136	0.061	Drone Grid 1
25894	7	Y	N	Y	N						Aerial photo mapped
25894	8		N	N	N						Aerial photo mapped
25894	9		N	N	N						Aerial photo mapped
25894	10		N	N	N						Aerial photo mapped
25894	11		N	N	N						Aerial photo mapped

MODELLING

TOPOGRAPHY

Small topographic models were made for the ML 100124 area, Telegraph Road South, and for Guns Knob using the Geoscience Australia 1-sec SRTM data as a base and patching in the higher accuracy Drone Survey data, where available. See Figure 22 as an example. Triangulation methods were used in Minescape Stratmodel 5.12 to generate the surfaces which then form the upper limit for the “above ground” wireframes generated.

Figure 22: Topographic Model for Guns Knob



ASSUMPTIONS & METHODOLOGY

This Mineral Resource estimate for Quartz Reefs within ML 100124 and EPM 25894 are based upon several factors and assumptions:

- All the available historical and current bulk sampling, rock chip and mapping data as of 15th July 2019 was used for the Mineral Resource estimate. The data was restricted to surface sampling as detailed in Appendix 1 JORC Table 1.
- The quartz reefs have significant surface expressions with Guns Knob Quarry extending 24m above the base topography. Outlines were interpreted using historical plans, geological interpretations from aerial and ground-based mapping and GPS traversing and sectional

views of the drilling information from the nearby Iceberg Reef (ML 100075), also owned by Greentech Minerals Limited (Tedman-Jones & Maher, 2016);

- The Mineral Resource has been depleted using a 3D void model of recorded historical open-cut quarrying operation at Guns Knob; however, this is an estimate, as no actual "as mined" records could be found.
- At May Downs, bulk sample tonnages have been removed from the resource tonnage.
- The Mineral Resource estimation parameters do not assume any mining methods at this early stage, however open-pit quarrying is expected to be the method of extraction.

MODELLING TECHNIQUES

As the quartz reefs are essentially homogeneous, a 3D block model was not required, and therefore modelling of each individual reef depended upon its size and the volume of traverse mapping and sampling data collected to construct a reef model.

Two methods were used, as follows:

1. For smaller or unsampled reefs, trapezoidal shapes were created, and manual calculations performed.
2. Triangulated wireframes were generated for the larger, well-mapped and sampled bodies.

TRAPEZOIDAL SHAPES

At some of the minor reefs sampled the reef margins were mostly obscured by quartz scree and consequently the actual width has been conservatively estimated. At three (3) localities the in-situ quartz is approximately 10-20m wide and assuming some contamination with inclusions and metasomatic interaction at or near the quartz/granite contacts, the perimeter was reduced by 3m from the mapped extent to be conservative.

Where a reef was not wireframed, the following formula was used for a trapezoidal prism:

$$T = A \times (W_b \times W_t) \div 2 \times SG$$

where:

T is the estimated tonnage (in metric tonnes).

A is the area of the quartz reef (metres²).

W_b is the width at base (in metres).

W_t is the width at top (in metres).

(W_b x W_t) ÷ 2 (volume of trapezoid formulae)

SG is the specific gravity (bulk density) of pure quartz (in kg/m³).

WIREFRAMES

Reefs 1 to 3 dip between 70° and 85° to the west and rise from approximately 2m to 36m above the surrounding, somewhat flattish, planar land surface. Detailed observations around the rock chip sample sites, combined with the knowledge gained from HQ diamond coring at Greentech's Iceberg Reef in ML 100075 has indicated that the interpreted quartz sub-crop may be less substantial in width than originally recorded. This is due in part to the large amount of scree (boulder rubble) on and around the main outcrop margins.

Additionally, the drilling at Iceberg, whilst showing vertical extents to at least 36m did show thinning of the reefs down-dip. Therefore, the cross-sectional polygons were reduced in area at the base depth compared to those constructed in 2016 where the "below ground" wireframes were vertically sided and extended down-dip using the surface area shape.

Triangulation was used to construct wireframes of above and below ground reefs, with only one grade assigned to each wireframe (SiO₂), being an average of the available assay data, but weighted toward the results from the bulk samples at Reefs 1, 2, and 3. Extensive trace element analyses were also completed to reveal the extent of major impurities: Al (ppm), Fe (ppm), K (ppm), Pb (ppm), B (ppm), Mn (ppm), Pb (ppm), and S (ppm). As such, no top-cuts were applied during the estimation to remove skewing of the grade estimations.

For the Guns Knob wireframe, the Mineral Resource calculated has been depleted using a 3D void model of the field expression of the historical open-cut quarrying operation; however, this is an estimate, as no actual "as mined" records could be found. A model completion certificate has been included as Appendix 5.

MINERAL RESOURCE ESTIMATION

REASONABLE PROSPECTS

Encouraging analytical results were received from a preliminary program of outcrop sampling carried out by Millungera Energy Minerals (MEM) at the Area 1 Quartz Reefs (now largely covered by ML 100124) in October 2015. This resulted in Greentech Minerals, who had bought into the project, carrying out a follow-up rock chip sampling and mapping program in March 2016 to investigate its potential as a source of High Purity Quartz (HPQ). From these two (2) programs a total of six (6) rock chip samples were dispatched to the ALS laboratories in Brisbane, Queensland. Bulk samples were also taken at this time totalling 68,420kg and were sent to various laboratories and silica manufacturers in China for testing and beneficiation.

Contemporaneously, two (2) tenures also owned by Greentech Minerals, EPM 19373 and ML 100075, had analytical results from ALS that show HPQ is also present at the Iceberg Quartz Reef. CSA Global (Tedman-Jones and Maher, 2016) had estimated an Indicated Mineral Resource of 11,000 tonnes of "Low grade" HPQ for the Central Quartz Reef area and an Inferred Mineral Resource estimate of 17,000 tonnes of "Low grade" HPQ for the Northern, Eastern and Western Quartz Reef areas. The Mineral Resource was estimated in accordance with the 2012 JORC Code. Reasonable prospects for eventual economic extraction can be shown from a combination of work carried out within the tenures and on adjacent tenures where a JORC 2012 Code resource has already been declared.

A 2016 preliminary mine design and proposed extraction plan for the Raw HPQ resources within ML 100124 was based on developing a small-size open pit capable of producing sufficient crushed lumped material over a period of 5 years. The mining technique documented would be selective and require a trained operator to aim for the HPQ rock utilising a mechanical rock breaker and excavator. The HPQ rock would be mechanically broken down and transferred for beneficiation on site to produce crushed lump size material (Osborne, 2016).

It is envisaged that the Raw HPQ lumps would be refined off site. Conversion of raw quartz into refined high purity and high value quartz products needs advanced comminution technology. Comminution reduces raw quartz to the required product size and liberates mineral impurities. Further mechanical, physical, chemical, and thermal steps are needed to separate or dissolve the impurities to meet final quality requirements.

Raw High Purity Quartz Justification

Representative surface and bulk samples were taken for detailed investigation to evaluate the potential of the raw material to be processed into a high value refined product. On a ROM basis, i.e., no beneficiation, all the quartz reefs analysed (except for Water Tank), meet the specification for "Low Grade" High Purity Quartz as outlined in Table 10 below.

Table 10: Specification for 'Low Grade' High Purity Quartz

Type or Application	SiO ₂ (minimum %)	Other Elements (maximum %)	Other Elements (maximum ppm)	Market Size Mtpa	Typical price US\$/tonne
'Low grade' HPQ	99.95	0.05	500	0.75	\$300

Source: (Tedman-Jones & Maher, 2016)

MOISTURE

Because of the high purity of the quartz reefs, there is very little moisture extracted from the quartz and any mineral impurities, with both Loss on Ignition and moisture components returning extremely low values as shown in Table 11, below.

Table 11: May Downs Loss on Ignition

REEF ID	Easting GDA94_Z54	Northing GDA94_Z54	Sample ID	OA-GRA05 LOI (1000°C) %	OA-GRA10 H2O %
WT_REEF	327142.0	7701370.0	WTR_Q1A	0.06	0.03
WT_REEF	327280.0	7702585.0	WTR_Q1B	0.05	0.02
WT_REEF	327940.0	7702876.0	WTR_Q1C	0.05	0.01
GUNS_KNOB	329780.6	7714674.4	GK_A1A	0.06	0.01
GUNS_KNOB	329780.6	7714674.4	GK_A1B	0.05	0.01
REEF_3	333923.0	7716876.7	A3_2	0.05	0.02
GUNS_KNOB	329807.5	7714655.3	GK01_1601	0.04	
REEF_2	334877.7	7715004.8	QB02_1601	0.05	
REEF_3	333930.2	7716866.3	QB03_1601	0.08	
GUNS_KNOB	329789.0	7714671.0	94385	0.04	
GUNS_KNOB	329763.0	7714684.0	94386	0.07	
REEF_2	334868.0	7715029.0	94387	0.07	
REEF_2	334882.0	7715005.0	94388	0.05	
REEF_2	334888.0	7714992.0	94389	0.06	
REEF_1	334604.0	7715028.0	94390	0.08	
REEF_1	334600.0	7715047.0	94391	0.05	
REEF_1	334598.0	7715065.0	94392	0.10	
REEF_1A	334640.0	7715065.0	94393	0.06	
REEF_4	334551.0	7714779.0	94394	0.05	
REEF_6	334177.0	7714452.0	94395	0.06	

The lowest LOI is 400ppm and the highest 1,000ppm, with the lowest moisture 100ppm and highest 300ppm.

BULK DENSITY

All tonnages are quoted on an air-dried basis, based on the relative densities shown in Table 12.

Table 12: Measurement of Relative Density

REEF ID	Easting GDA94_Z54	Northing GDA94_Z54	Sample ID	Relative Density g/cc
Reef_3	333925.7	7716851.1	G2015WTS0266	2.64
Reef_1	334598.4	7715057.4	BS1_2016	2.65
Reef_2	334876.0	7715012.8	BS2_2016	2.65
Reef_3	333928.3	7716855.7	BS3_2016	2.65
GUNS_KNOB	329789.0	7714671.0	94385	2.64
GUNS_KNOB	329763.0	7714684.0	94386	2.65
REEF_2	334868.0	7715029.0	94387	2.65
REEF_2	334882.0	7715005.0	94388	2.64
REEF_2	334888.0	7714992.0	94389	2.65
REEF_1	334604.0	7715028.0	94390	2.65
REEF_1	334600.0	7715047.0	94391	2.66
REEF_1	334598.0	7715065.0	94392	2.65
REEF_1A	334640.0	7715065.0	94393	2.64
REEF_4	334551.0	7714779.0	94394	2.65
REEF_6	334177.0	7714452.0	94395	2.65

CUT-OFF GRADE AND BASIS FOR SELECTED CUT-OFF GRADE

There was no cut-off grade as the wireframes covered the entire modelled quartz reefs and a SiO₂ grade assigned to each reef based on the drilling or surface sample results. Table 13 lists the average raw silica dioxide values for selected reefs based on the grab and bulk samples taken between 2015 and 2019.

Table 13: Average Raw Silica Content

REEF ID	Average Raw SiO ₂ % wgt
Reef_1	99.931
Reef_1A	99.961
Reef_2	99.964
Reef_3	99.949
REEF_4	99.960
REEF_6	99.959
GUNS_KNOB	99.957
WATER TANK	99.959

Silica values reported are not analysed but represent 100% minus the sum of the trace elements excluding the LOI, the reason being that the insitu resource of the quartz is quoted as on an "air-dried" basis.

MINING FACTORS AND ASSUMPTIONS

A mine design and proposed extraction plan for the Raw HPQ resource was completed by an experienced mining engineer in 2016, based on developing a small size open pit capable of producing sufficient crushed lumped material over a period of 5 years. May Downs Reefs 1 and 2 should be an adequate resource base for this objective (Osborne, 2016).

The mining technique used would need to be selective and require a trained operator to aim for the HPQ rock utilising a mechanical rock breaker and excavator. The HPQ rock would be mechanically broken down and transferred for beneficiation on site.

The beneficiation equipment required to produce the lumped quartz will consist of a jaw crusher and screens. The lump material would then be stockpiled for transport off site to a processing and refinement facility.

Scalable equipment would allow for the transition, from lab scale development to pilot plant scale to commercial production to meet customer demand.

It is expected that three (3) people would be required to run the operation and consist of a site manager, excavator operator and mechanic/loader operator. The site would require an office facility with communication services.

It is envisaged that the Raw HPQ lumps would be refined off site. Conversion of raw quartz into refined high purity and high value quartz products needs advanced comminution technology. Comminution reduces raw quartz to the required product size and liberates mineral impurities. Further mechanical, physical, chemical, and thermal steps are needed to separate or dissolve the impurities to meet final quality requirements. The main stages of the process may be summarised as:

- Pre-processing (mechanical);
- Physical processing.
- Chemical leaching.
- Thermal treatment.

CRITERIA USED FOR CLASSIFICATION

The methodology used in assigning confidence limits to the resources classification of the quartz reefs is documented in Table 14 below.

Table 14: Resource Confidence Class Methodology

Class	Outcrop	Drone Survey	Bulk Sample	Sampling	RAB and DDH drilling	Traversing	Notes
Measured	Yes	Yes	Bulk Sample site plus margin of 15m either side	>5 rock chip samples	Yes, if no bulk sample	Yes	
Indicated	Yes	Yes	No, but adjacent to a Bulk Sample at >15m away	2-5 rock chip samples	Not mandatory but would help	Yes	
Inferred	Underground to 30m	Not required	No	1-2 rock chip samples	No	Yes	Based on drilling results at Iceberg Quartz Reef extend to at least 35m depth
Exploration Target	Must outcrop	No	No	No, but near a sampled reef	No	No, interpretation from aerial survey	Lesser Reef outlines based on interpretation of ASTER Quartz and Silica Indexes

OTHER INFORMATION

Inclusion Studies

The geochemical characteristics of the quartz reefs at May Downs suggest that the thicker quartz reefs contain relatively high purity silica cores but decrease in quality near the margins of the reef. Recent field observations in the Guns Knob vicinity indicate that reefs in the area tend to have occurrences of coarsely crystalline pink feldspar mainly along reef margins and contact zones and with an occasional association of bladed ilmenite. The thicker quartz reefs have a “clean” quartz core.

These characteristics most likely relate to how the quartz reefs originated. Their apparent proximity to granitic rocks implies hydrothermal/metamorphic-sourced silica saturated fluids filling dilation zones (e.g., intrusive cupola radial dilation zones; tectonic dilatational faults, etc.). Host wall rocks would be a cause of contamination. This contamination would be reduced as subsequent silica fluid pulse influxed into increasingly dilated zones. As the new silica pulse contacts pure silica wall rocks from the previous pulse thus preventing further wall rock contamination as the veins thicken into reefs.

At May Downs, the quartz veins occur as thick reefs up to 20m injected into high-grade muscovite and biotite schists of the Alpha Centauri Metamorphics. The only inclusions noted in the field have been tourmaline ($\text{NaFe}^{2+}_3\text{Al}_6\text{Si}_6\text{O}_{18}(\text{BO}_3)_3(\text{OH})_4$) in the smaller, thinner, reefs (e.g., Reef 1A and Reef 5).

Contrasting this, at Guns Knob North and Reef observed quartz veins that were narrow (approximating 1.0 – 6 metres in thickness) commonly were associated with pink feldspar (orthoclase or “potash feldspar”) and occasional ilmenite bladed crystals. The wider veins also had similar associations but with feldspar tending to be confined to the margins of the veins. The following minerals probably caused any contamination present:

- Orthoclase feldspar (KAlSi_3O_8) will contaminate silica analyses with potassium and aluminium. Other elevated traces associated with potash feldspar include sodium and calcium.
- Ilmenite (FeTiO_3) will contaminate silica samples with titanium, iron and other associated traces including manganese, nickel, and magnesium.
- Some samples and outcrops were observed to be commonly fractured and broken with kaolinitic clay and greenish clay infill and common red-orange limonite.
- Kaolinite ($\text{Al}_2\text{Si}_2\text{O}_5(\text{OH})_4$) is a hydrated aluminium silicate, so will contaminate samples with aluminium. Due to the phyllosilicate (layered) structure of this mineral, it is prone to adsorb many trace elements including iron giving the mineral a greenish hue.
- Limonite ($\text{FeO}(\text{OH})\cdot n\text{H}_2\text{O}$) is a hydrous iron oxide, commonly circulated throughout the zone of water table oscillation mobilised by seasonal weather variations (weathering zone commonly down to depths of 30-60m+, but mainly from surface to about 30m). This is the main source of iron contaminated in the raw field samples.

A detailed review of inclusions in the reef quartz was undertaken by the University of New South Wales, Sydney in September 2017, with such a study vital in understanding if the hard rock quartz can make a saleable and upgradeable industrial product (Ukritnukun, Koshy, & Sorrell, 2017). Three (3) samples representing May Downs (Reef 1), Iceberg and Water Tank were provided.

The samples were analysed microstructurally by image analysis using optical microscopy (OM) and scanning electron microscopy (SEM) coupled with energy dispersive spectroscopy (EDS). Very low levels of impurities were found. The UNSW study concluded that from the microstructural and chemical analyses, the recommended site for mining is May Downs Reef 1 or Iceberg since the total amounts of impurities are similar.

GEOLOGICAL RISKS

STRUCTURAL RISKS

Structural risks to the reef blows from faulting curtailing mineralisation appear low as the reefs are normally elongated ribbon shapes with ends that come to a point and either exist or don't. No structural deformation such as folding, or faulting was observed in any reef mapped, with most mapped displaying very steep bedding (>80°).

INTRUSION RISK

The quartz reefs or blows are themselves very thick veins intruded into the country rock, so don't appear to be affected by intrusions directly. The quartz reefs in the Guns Knob area are intruded into a gneissic and pegmatitic country rock and do have biotite and orthoclase inclusions on the margins of the reefs.

ASSAY RISK

Assay results to date have retained very little variation in silica content and to a lesser degree mineral impurity. The overall risk to representativeness has been lessened in Reefs 1, 2, and 3 with the testing, both raw and beneficiated, of a combined total of 68t of bulk sample.

GEOTECHNICAL RISK

No geotechnical risk has been examined yet as there has been no drillholes completed to-date and therefore no geotechnical testing has been undertaken. Geotechnical sampling and analysis will be required for mine design core criteria such as batter angles.

TOPOGRAPHY RISK

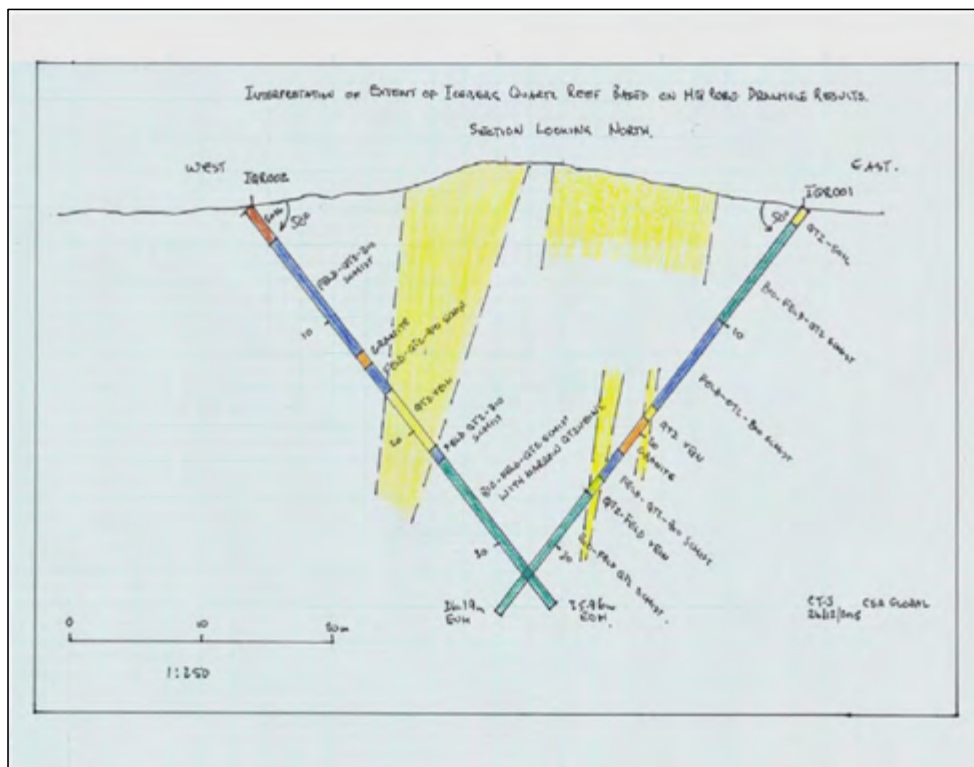
Topographic risk has been minimised by the flying of a drone survey over the main reefs at Telegraph Rd and Guns Knob.

RESOURCE ESTIMATE

The main quartz reef sets were defined as May Downs Reefs 1 to 16, Guns Knob Quarry, Guns Knob 1 to 5, Water Tank North Reefs 1 and 2, and Water Tank Reef 1. For estimating the volume of HPQ in each of the mapped areas, the reefs are defined as irregular wireframes created using the mapping and drilling data to constrain the sectional areas. The wireframes are based on surface traversing and rock chip sampling. The surface area of each reef was calculated using Minescape Stratmodel 5.12 module.

The drilling of ML 100075 by Nova Strategic Minerals in 2015 has exposed the reef's structure as inverted pyramids rather than vertical-sided prisms. This has aided the geological modelling of the May Downs 'below ground' wireframes which have been redesigned to inverted pyramids. An extension to a 5m depth is regarded as having reasonable prospects for eventual economic extraction and was determined for the purpose of estimating Measured, Indicated and Inferred Mineral Resource for the mapped Quartz Reef areas. The basis for the up to 5m extension is that the Quartz reefs were intersected at depths down to 36m in the HQ diamond coring at Iceberg Reef in ML 100075, where they were also sampled (see Figure 23).

Figure 23: ML100075 Sub-Surface drilling



Notes:

1. Iceberg Quartz Reef, which is interpreted down-dip extension of surface outcrop as evidenced by detailed geological logging.
2. Core samples were taken and assayed for major oxides and trace elements.

Where the quartz extends above the ground surface along the full strike length, this tonnage has been estimated in accordance with the 2012 JORC Code with a total Indicated Quartz Resource of 160,800t (Table 14) and refer to JORC Table 1 (Appendix 1). Measured masks were generated around the bulk sample sites and are surrounded by, but separate from, the Indicated masks. A total of 71,500t of Measured Resources was estimated.

To be conservative some shallower depths were used to limit wireframe construction in the smaller reefs at May Downs. Accordingly, if the reef is extended to below the ground surface (distance varies per reef between 1 - 5m), then there is an additional Inferred Quartz Resource of about 155,000t. This resource estimate refers to only those reefs within easy road access, although many more exist in less accessible terrain.

An estimate of the remaining thirty (30) quartz reefs revealed tonnages to the level of an Exploration Target between 0.15 and 0.47Mt of quartz exists within the tenure, but these remain to be



investigated. Detailed mapping and sampling should confirm these tonnage estimates. Resource Estimates are summarised below in Table 15 with the full calculations appended in Appendix 2.

Table 15: Comparison of 2012 JORC Code Resources between 2016, 2019, and 2021

Year	Tenures	No. Reefs	Exploration Target – Low Range	Exploration Target – High Range	Inferred	Indicated	Measured
			1,000t	1,000t	1,000t	1,000t	1,000t
2016	EPM 25894	11	-	-	478	200.8	-
2019	EPM 25894, ML 100124	69	600	1,230	479	160.8	71.5
2021	EPM 25894, ML 100124	41	146	471	155	160.8	71.5
2021	Sub-Totals		146	471	155	160.8	71.5

Notes:

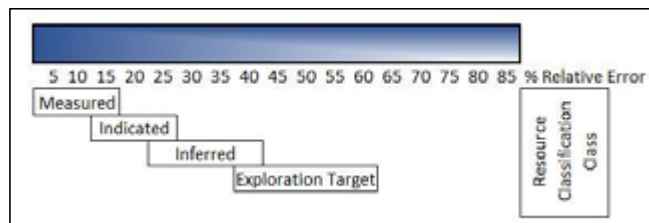
1. Guns Knob Quarry 487.81m² mined out removed.
2. JORC Table 1 has been appended (refer to Appendix 1).
3. See Appendix 2 for detailed resource calculations and Appendix 3 for assay results. All the Exploration Targets have been extended between 3m and 10m below ground.
4. The laboratory air-dried densities were used to calculate gross in-situ tonnes.
5. It should be noted that where Exploration Target tonnages are quoted, they are conceptual in nature and there has been insufficient exploration to define a mineral resource.
6. The Exploration Targets were generated using the same methodology as the Inferred but fell outside wireframes or insufficient sampling was available.
7. For the Exploration Target tonnages, it is uncertain whether further exploration may lead to the reporting of a 2012 JORC Code resource, however the areas are adjacent to or underlying the existing Inferred Resources.

RELATIVE ACCURACY AND CONFIDENCE

Based on the statistical study conducted on varying iterations of reef widths and lengths, a relative error estimate on stated tonnages would be as follows and is illustrated by Figure 24:

- Measured ±10%.
- Indicated ±15%.
- Inferred ±30%.
- Exploration Target ±40%.

Figure 24: Resource Classification Class Relative Error



Modified after (Biggs, 2015)

COMPETENT PERSONS DECLARATION

QUALIFICATIONS AND EXPERIENCE

This Report has been prepared by Mark Biggs for and on behalf of Greentech Minerals Ltd. Mark Biggs has over 38 years of experience in base metal, industrial mineral, coal exploration and mine evaluation throughout Australia. He has worked extensively within the Bowen and Surat Basins and was resident at several Central Queensland coal mines for 22 years. He has held several roles in these mine's Technical Services, including Senior Geologist, Chief Geologist, Coal Quality and Scheduling Superintendent and Acting Technical Services Manager. He is a Competent Person for coal and industrial minerals as defined by the JORC Code (2012) and has extensive experience in open-cut and underground exploration techniques, geophysical techniques, coal quality, geotechnical and structural modelling, mining, and scheduling.

Mark is the Managing Director and Principal Geologist for ROM Resources, which has been operating since 2012. His principal qualifications are a B. App. Sci. and a M. App. Sci. from the Queensland University of Technology. Mark is a Member of The Australasian Institute of Mining & Metallurgy and a Member of the Geological Society of Australia. In November 2018, Mark successfully completed the inaugural AusIMM Online Professional Certificate in JORC Code Reporting Course.

INDEPENDENCE AND DISCLOSURE

Neither Mark Biggs nor ROM Resources have a direct or indirect financial interest in, or association with Greentech Minerals Ltd or any of their subsidiary companies, the properties and tenements reviewed in this report, apart from standard contractual arrangements for the preparation of this report and other previous independent consulting work. In preparing this report, ROM Resources has been paid a fee for time expended based on its standard daily rates. The present and past arrangements for services rendered to Greentech Minerals Ltd do not in any way compromise the independence of ROM Resources with respect to this review.

LIMITATION

The views expressed in this Competent Person's Report are solely those of ROM Resources and Mark Biggs, unless specifically identified within the report as those of other parties. To the extent permitted by law, Mark Biggs and ROM Resources disclaims all liability for loss or damage (whether foreseeable or not and whether indirect or not) suffered by any person acting on the report or arising as a consequence of the information in the Competent Person's Report on the Mineral Resources within EPM 25894 and ML 100124, whether such loss or damages arises in connection with any negligence, default or lack of care on behalf of other parties associated with the preparation of the report.

CONSENT

ROM Resources hereby consents to the inclusion of this Competent Person's Report in any public reporting, in both electronic and hard copy format, in the form and full context in which it appears. As at the date of the Competent Person's Report set out above ROM Resources has not withdrawn consent.


ROM Resources was only commissioned to prepare the Competent Person's Report and has only authorised issue of this Competent Person's Report on Greentech Minerals Ltd exploration tenements specified in the Competent Person's Report. It has not been involved in the preparation of, or authorised issue of, any other part of any of Greentech Minerals Ltd reporting, in which this Competent Person's Report is included.

DISCLAIMER

This Report is to be read as a whole, and sections or parts thereof should therefore not be read or relied upon out of context. This disclaimer must accompany every copy of the Report, which is an integral document and must be read in its entirety.

COMPETENT PERSON'S STATEMENT

The estimates of the Mineral Resources presented in this Report are considered to be a true reflection of the Mineral Resources as of 28th October 2022 and have been carried out in accordance with the principles and guidelines of the Australian Code for Reporting of Mineral Resources and Reserves published in December 2012 (JORC Code). It should be noted that where Exploration Target tonnages are calculated in the report, they are considered conceptual in nature. There has been insufficient exploration to define a Mineral Resource and that it is uncertain if further exploration will result in the determination of a Mineral Resource.

NAME	JOB TITLE	REGISTRATION	EXPERIENCE (YEARS)	SIGNED
M Biggs	Principal Geologist ROM Resources	AusIMM 107188	31	

CONCLUSIONS

Several high purity quartz reefs have been investigated by Greentech Minerals Ltd within EPM 25894 and ML 100124 through detailed remote sensing interpretation, field geological observations, bulk sampling, and chemical analyses. The results indicate the presence of a high value hard rock quartz resource suitable as an exportable feedstock to the High Purity Quartz (HPQ) sand and powder process industry globally. Raw insitu quartz content exceeds 99.95% SiO₂ (excluding LOI, refer to Table 13).

A resource estimate for eleven (11) of the major reefs was calculated and was based on data collected between October 2015 and May 2019. A total of 71,500t of Measured, 160,800t of Indicated and 155,000t of Inferred Resources that meets the standard of the 2012 JORC code was estimated. In the remaining forty-one (41) reefs a low range of 146,000t to a high range of 471,000t of Exploration Target was estimated, but these reefs require further mapping and sampling to upgrade their confidence class. The 2019 report was rebadged in October 2021 consistent with the change in name from Yilgarn Minerals Limited to Greentech Minerals Limited. Further revisions were made during September-October 2022. Inferred resources below ground have been reduced to depths more supportable from the available mining and sampling.

Enough resource has now been delineated to begin mine planning, which in turn provides a pathway for work to commence on a Scoping Study. Outcomes from that study will confirm if the quartz from EPM 25894 and ML 100124 contains a commercially viable export resource of a highly strategic mineral.

RECOMMENDATIONS

Further work is recommended, which would involve diamond core drilling and sampling to evaluate this resource to depths in the vicinity of 50m below the ground surface and provide sub-surface quartz for analyses.

Four (4) sites have been selected with the objectives of obtaining continuous cores through the Telegraph Road and Guns Knob Quarry reefs. This data will be used to provide more accurate sub-surface resource assessment which could be used to further convert the sub-surface distribution of the Inferred to an Indicated Quartz Resource and via commercial studies into a Probable Quartz Reserve suitable for open-cut mining. Planned drillhole coordinates are listed below in Table 16.

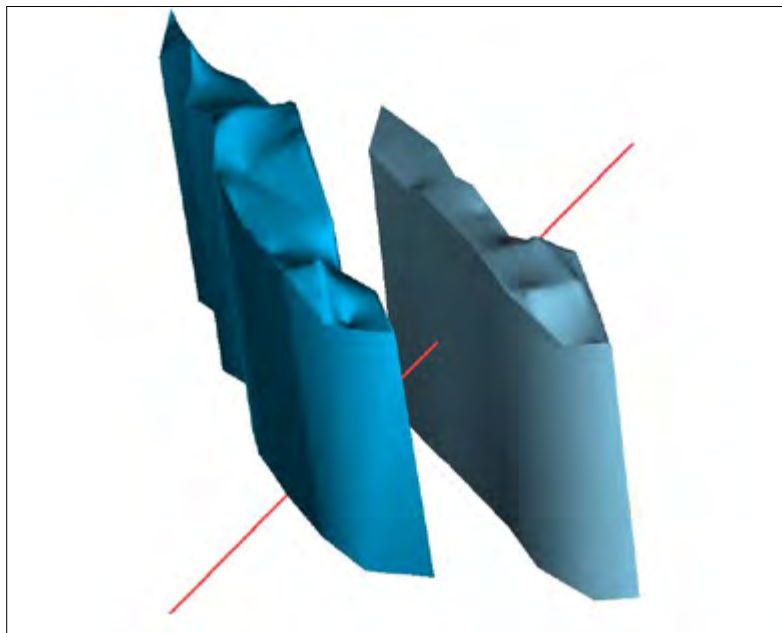
Table 16: EPM 25894 Proposed Drilling Location

ID Number	Location	Easting	Northing	AHD	Declination (deg)	Tot. Depth (m)
1	Guns Knob	329760	7714670	412	-60	80
2	Reef 1	334580	7715045	375	-50	80
3	Reef 2 & 2A	334925	7715015	376	-50	80
4	Reef 3	333900	7716850	382	-50	80

Schematic diagrams showing drill depths and lithological prognoses have been completed for each drill hole. Figure 25 demonstrates an example of a drillhole intersecting Reefs No. 2 and 2A. Actual site locations may need to be modified due to factors such as off-road drill rig access and possible difficulties in the construction of level drill pads on sloping surfaces in proximity to the quartz reef.

Each hole is designed to depths of 80m, and drill azimuths vary, being perpendicular to each quartz blow. Dips from horizontal vary between -50 and -60 degrees. Additional drill rods, to enable drill depths of 100m might be required if the rig must be positioned further from the reef than is indicated in the drilling prognoses.

Figure 25: Proposed Drillhole of Reef No's. 2 & 2A



New geological data also needs to be collected at the more prospective of the minor reefs, especially those proximal to the larger reefs, which are currently identified as Exploration Targets. If sufficient information is collected, the geological model will need to be updated which could lead to reporting of Indicated Resources for the above-ground section and Inferred for the sub-surface component.

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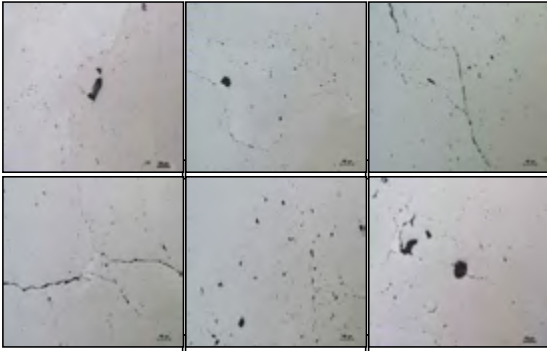
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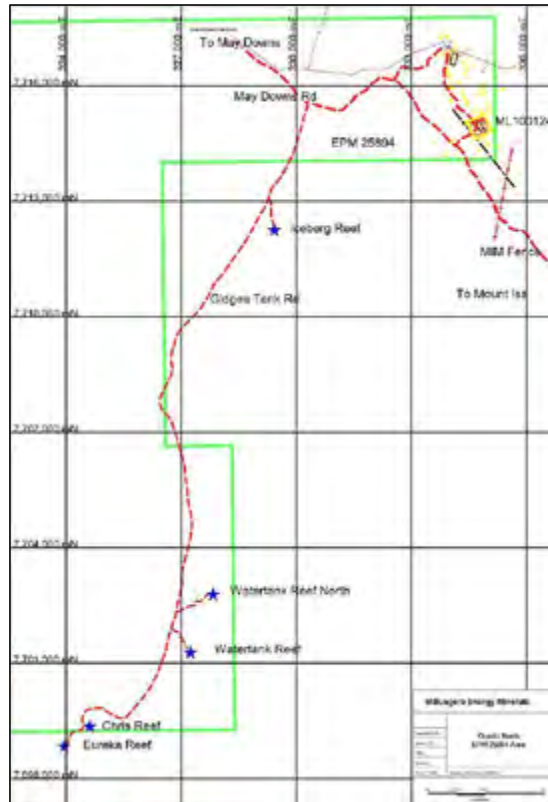
APPENDIX 1: 2012 JORC TABLE 1

SECTION 1: SAMPLING TECHNIQUES AND DATA TABLE

Criteria	Commentary																																																																																																																																																						
<p>Sampling Techniques</p> <ul style="list-style-type: none"> Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information. 	<p>Recent surface chip samples have been collected across the strike of the reef at six (6) localities at regular intervals. Then, samples were amalgamated into one representative sample for the entire width of the outcrop. These large fragments, (approximately 200) were reduced in size by breaking with an Estwing hammer (geological pick) and a few fragments from each piece, these were mixed and weighed into individual sample bags, each containing 500-1500g of quartz. The recent sampling campaign is listed below in the following Table, and the complete sampling catalogue is included as Appendix 3.</p> <table border="1"> <thead> <tr> <th>Sample_ID</th> <th>Easting</th> <th>Northing</th> <th>AHD</th> <th>Analysis Weight</th> <th>Date Collected</th> <th>LOI %</th> <th>Type</th> </tr> </thead> <tbody> <tr> <td>GK01_1601</td> <td>329807.5</td> <td>7714655</td> <td>413</td> <td>0.45</td> <td>22/3/16</td> <td>0.04</td> <td>Rock chip</td> </tr> <tr> <td>Q802_1601</td> <td>334877.7</td> <td>7715005</td> <td>383</td> <td>0.44</td> <td>22/3/16</td> <td>0.05</td> <td>Rock chip</td> </tr> <tr> <td>Q803_1601</td> <td>333930.2</td> <td>7716866</td> <td>274.2</td> <td>0.21</td> <td>22/3/16</td> <td>0.08</td> <td>Rock chip</td> </tr> <tr> <td>94385</td> <td>329789</td> <td>7714671</td> <td>418</td> <td>1.27</td> <td>13/5/19</td> <td>0.04</td> <td>Rock Chip</td> </tr> <tr> <td>94386</td> <td>329763</td> <td>7714684</td> <td>412</td> <td>1.43</td> <td>13/5/19</td> <td>0.07</td> <td>Rock Chip</td> </tr> <tr> <td>94387</td> <td>334868</td> <td>7715029</td> <td>381</td> <td>1.16</td> <td>14/5/19</td> <td>0.07</td> <td>Rock Chip</td> </tr> <tr> <td>94388</td> <td>334882</td> <td>7715005</td> <td>384</td> <td>0.94</td> <td>14/5/19</td> <td>0.05</td> <td>Rock Chip</td> </tr> <tr> <td>94389</td> <td>334888</td> <td>7714992</td> <td>383</td> <td>1.09</td> <td>14/5/19</td> <td>0.06</td> <td>Rock Chip</td> </tr> <tr> <td>94390</td> <td>334604</td> <td>7715028</td> <td>375</td> <td>0.76</td> <td>14/5/19</td> <td>0.08</td> <td>Rock Chip</td> </tr> <tr> <td>94391</td> <td>334600</td> <td>7715047</td> <td>376</td> <td>0.63</td> <td>14/5/19</td> <td>0.05</td> <td>Rock Chip</td> </tr> <tr> <td>94392</td> <td>334598</td> <td>7715065</td> <td>366</td> <td>1.42</td> <td>14/5/19</td> <td>0.01</td> <td>Rock Chip</td> </tr> <tr> <td>94393</td> <td>334640</td> <td>7715065</td> <td>374</td> <td>0.88</td> <td>14/5/19</td> <td>0.06</td> <td>Rock Chip</td> </tr> <tr> <td>94394</td> <td>334551</td> <td>7714779</td> <td>381</td> <td>0.80</td> <td>14/5/19</td> <td>0.05</td> <td>Rock Chip</td> </tr> <tr> <td>94395</td> <td>334177</td> <td>7714452</td> <td>380</td> <td>0.50</td> <td>14/5/19</td> <td>0.06</td> <td>Rock Chip</td> </tr> </tbody> </table> <p>Three (3) bulk samples totalling 68t of material were collected in March 2016. Testing results for bulk samples were reported on both an "as received" and acid-washed results. The location of the bulk samples is given below:</p> <table border="1"> <thead> <tr> <th>Site</th> <th>Sample Id</th> <th>Easting</th> <th>Northing</th> <th>Mass (kg)</th> <th>Raw SiO₂ %</th> </tr> </thead> <tbody> <tr> <td>Reef 1</td> <td>BS 1</td> <td>334603.5</td> <td>7715049.5</td> <td>19,660</td> <td>99.92</td> </tr> <tr> <td>Reef 2</td> <td>BS 2</td> <td>334876.0</td> <td>7715012.8</td> <td>23,000</td> <td>99.94</td> </tr> <tr> <td>Reef 3</td> <td>BS 3</td> <td>333930.2</td> <td>7716866.3</td> <td>25,760</td> <td>99.91</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>68,420</td> <td></td> </tr> </tbody> </table> <p>Sampling of Reef 1A is shown below.</p> 	Sample_ID	Easting	Northing	AHD	Analysis Weight	Date Collected	LOI %	Type	GK01_1601	329807.5	7714655	413	0.45	22/3/16	0.04	Rock chip	Q802_1601	334877.7	7715005	383	0.44	22/3/16	0.05	Rock chip	Q803_1601	333930.2	7716866	274.2	0.21	22/3/16	0.08	Rock chip	94385	329789	7714671	418	1.27	13/5/19	0.04	Rock Chip	94386	329763	7714684	412	1.43	13/5/19	0.07	Rock Chip	94387	334868	7715029	381	1.16	14/5/19	0.07	Rock Chip	94388	334882	7715005	384	0.94	14/5/19	0.05	Rock Chip	94389	334888	7714992	383	1.09	14/5/19	0.06	Rock Chip	94390	334604	7715028	375	0.76	14/5/19	0.08	Rock Chip	94391	334600	7715047	376	0.63	14/5/19	0.05	Rock Chip	94392	334598	7715065	366	1.42	14/5/19	0.01	Rock Chip	94393	334640	7715065	374	0.88	14/5/19	0.06	Rock Chip	94394	334551	7714779	381	0.80	14/5/19	0.05	Rock Chip	94395	334177	7714452	380	0.50	14/5/19	0.06	Rock Chip	Site	Sample Id	Easting	Northing	Mass (kg)	Raw SiO ₂ %	Reef 1	BS 1	334603.5	7715049.5	19,660	99.92	Reef 2	BS 2	334876.0	7715012.8	23,000	99.94	Reef 3	BS 3	333930.2	7716866.3	25,760	99.91					68,420	
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Drilling Techniques	No drilling has taken place within EPM 25894 by Greentech Minerals																																																																																																																																																						

<ul style="list-style-type: none"> • Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<p>Ltd. Several registered water bores and 2 historical drillholes, 1 for base metal and 1 for uranium exploration were drilled in the 1970's.</p>
<p>Drill Sample Recovery</p> <ul style="list-style-type: none"> • Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<p>Not applicable as no drilling has taken place.</p>
<p>Logging</p> <ul style="list-style-type: none"> • Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged. 	<p>No drilling has taken place, only qualitative visual field descriptions relating to the colour of the samples, nature of inclusions were made. Bedding information was collected from field traverses.</p>
<p>Sub-sampling Techniques and Sample Preparation</p> <ul style="list-style-type: none"> • If core, whether cut or sawn and whether quarter, half or all core taken. • If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled. 	<p>Chip samples are collected on 5m interval basis, then composited. Samples were dry.</p> <p>A sample from Reef 3, weight = 10 kg, was sent to the Chinese laboratory of National Centre of Quality Supervision & Inspection on Deep Processing Silicon Products in 2015.</p> <p>The 2015, 2016 and 2019 samples were sent to Australian Laboratory Services Pty Ltd (ALS) Brisbane. These 20 samples were processed via a standard sample preparation procedure including pulverisation in Tungsten carbide mills. ALS highlighted that cobalt (Co) and tungsten (W) are not reported by ME-MS61 as the results are elevated due to contamination by tungsten carbide imparted to the sample during the milling and crushing processes.</p>
<p>Quality of Assay Data and Laboratory Tests</p> <ul style="list-style-type: none"> • The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total • For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	<p>The two main methods used were:</p> <p>The ME-ICP64 method is suitable for analysis of silica samples at ppb detection limits. The ALS Minerals laboratory is ISO 9001 certified. The original lab certificates have been signed by the laboratory manager.</p> <p>The ME-MS61 Method from ALS utilizes a four acid digestion dissolves nearly all minerals in most geological samples. ME-MS61 provides extensive coverage of 41 trace elements as well as major element oxides for mineralogy using ICP-MS and ICP-AES analysis.</p> <p>The rare earth elements, which are not fully extracted in a four-acid digestion, may be added to this package on request. Mercury must be analysed separately.</p> <p>For ALS, normal internal laboratory quality assurance was conducted.</p> <p>Quartz rock chip and bulk samples sent to China for raw and beneficiation trials were either tested by factory laboratories e.g. Experimental Branch of Jiangsu Yangshan Silicon Materials Technology Co., Ltd., or at the National Silicon Material Deep Processing Product Quality Supervision and Inspection Centre. Laboratory Standards usually quoted are:</p> <ul style="list-style-type: none"> • JY/T015 - 1996: General Principles of The Emission Spectroscopic Method of Sensitive Lymonized Plasma Atomic Emission, and. • SJ3228.4 - 1989: The Determination of Silica in High Purity Quartz Sand. <p>The China National Centre of Quality Supervision & Inspection on Deep Processing Silicon Products is certified under ISO 17025 standards. The laboratory certificates were signed by the laboratory</p>

	<p>analyst.</p> <p>A detailed review of inclusions in the reef quartz was undertaken by the University of New South Wales, Sydney in September 2017, with such a study vital in understanding if the hard rock quartz can make a saleable and upgradeable industrial product (Ukritnukun and others, 2017). Three samples representing May Downs (Reef 1), Iceberg and Water Tank were provided.</p> <p>The samples were analysed microstructurally by image analysis using optical microscopy (OM) and scanning electron microscopy (SEM) coupled with energy dispersive spectroscopy (EDS). Low levels of impurities were found.</p> <p>The UNSW study concluded that from the microstructural and chemical analyses, the recommended site for mining is May Downs Reef 1 or Iceberg since the total amounts of impurities are similar.</p> <p style="text-align: center;">May Downs Reef 1 Microstructural Analysis</p> 
<p>Verification of Sampling and Assaying</p> <ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data. 	<p>Samples taken from the Water Tank and No. 3 Reef were split and duplicates of the same sample reanalysed to determine sample and laboratory error.</p> <p>Quality control in laboratory analysis was reported separately by ALS Laboratories and their reports are Appended (Appendix 4). Detections of instrument drift and bias was examined through the following methods:</p> <ol style="list-style-type: none"> 1. Sample Blanks (no material); 2. Certified Standards. 3. Duplicates of samples QB03_1601 and 94394. <p>This investigation revealed the laboratory methods employed matched the Standards error bounds and no other abnormal result was obtained with the blank testing or there was little observable variation between duplicates.</p>
<p>Location of Data Points</p> <ul style="list-style-type: none"> • Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control. 	<p>Several deposit specific topographic models were generated from data as listed:</p> <ol style="list-style-type: none"> 1. Geoscience Australia 1 sec SRTM, accuracy $\pm 2m$ x, y, 1.5m in z. 2. DJI Phantom 4+ with accuracies varying between ± 0.15 and 1m in x, y and 0.05 to 06m in z. 3. Infill Magellan hand-held GPS traversing as the lowest priority, accuracies in x, y, and z $\pm 4m$. <p>The DTM's for use in reef wireframe modelling were generated using triangulation and grid data loaded to Minescape. Topographic models were generated to cover Guns Knob and Telegraph Road areas.</p> <p>All data was converted to GDA1994, Zone 54 and height datum used for AHD. The location of the major exploration areas is shown in the figure below:</p>

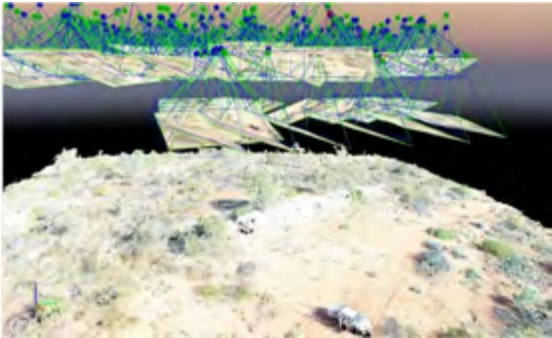


The drone taking off to grid survey Reef 2



The compilation of images from the drone grid survey of Reef 2 is shown below:




																					
<p>Data Spacing and Distribution</p> <ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	<p>Data spacing varied from reef to reef. For Water Tank, and Reefs 1A, 4, and 6 only one (1) sample was taken per reef. For the other major reefs sampling is as follows in the table below:</p> <table border="1" data-bbox="740 860 1305 981"> <thead> <tr> <th>Reef</th> <th>No. of Bulk Samples</th> <th>No. of Rock Chip Samples</th> <th>RMS Average Spacing (m)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>1</td> <td>3</td> <td>8.9</td> </tr> <tr> <td>2</td> <td>1</td> <td>5</td> <td>17.0</td> </tr> <tr> <td>3</td> <td>1</td> <td>2</td> <td>10.7</td> </tr> <tr> <td>Guns Knob</td> <td>-</td> <td>3</td> <td>15.6</td> </tr> </tbody> </table>	Reef	No. of Bulk Samples	No. of Rock Chip Samples	RMS Average Spacing (m)	1	1	3	8.9	2	1	5	17.0	3	1	2	10.7	Guns Knob	-	3	15.6
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<p>Orientation of Data in Relation to Geological Structure</p> <ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<p>Chip sampling was undertaken across the strike of the ore bodies, no orientation-based sampling bias has been recognised.</p>																				
<p>Sample Security</p> <ul style="list-style-type: none"> The measures taken to ensure sample security. 	<p>The exploration geologist supervised all sampling and subsequent storage in field. The same geologist delivered samples to ALS Minerals lab in Brisbane and received an official receipt of delivery. One chip sample was sent to China by registered courier, and three bulk samples were shipped by sea container to several Chinese Ports for distribution to several end users for beneficiation trials and analyses.</p>																				
<p>Audits or Reviews</p> <ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<p>None completed.</p>																				

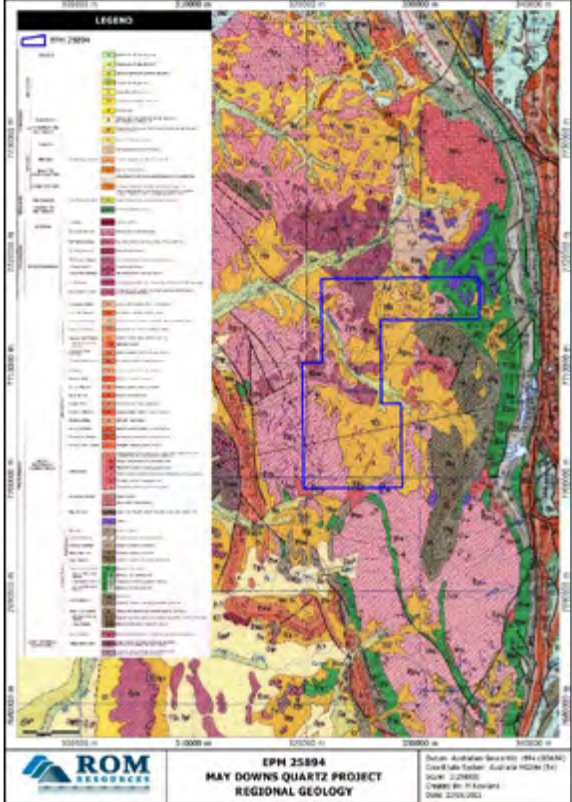


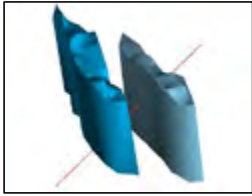
SECTION 2: REPORTING OF EXPLORATION RESULTS

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary																																																																																																											
<p>Mineral Tenement and Land Tenure Status</p> <ul style="list-style-type: none"> Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	<p>Quartz reefs occur consistently throughout EPM 25894. This tenement is granted and 100% owned by Millungera Energy Minerals Pty Ltd (MEM) which is a subsidiary of Greentech Minerals Ltd. Samples were also taken from ML 100124, which was also granted to Millungera Energy Minerals Pty Ltd in February 2018. The tenement is located 20 km West of Mount Isa, QLD, Australia (see map below). Restricted area RA 252 - Designated Fossicking Area is located within the tenement, partially covering sub-blocks CLON521 S, T, U, X, Y, Z.</p> 																																																																																																											
<p>Exploration Done by Other Parties</p> <ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<p>All previous investigation in the area targeted uranium, copper, and gold identification. Previous investigations are discussed in detail in the relevant text section. An existing mining lease to the south of EPM25894 is for building stone granite (Australian Granites Pty Ltd). A summary table of previous explorers is given below.</p> <table border="1"> <thead> <tr> <th>Year</th> <th>Prospect</th> <th>Company</th> <th>Mineralisation</th> <th>% Overlap</th> </tr> </thead> <tbody> <tr> <td rowspan="4">1961-1970</td> <td>ATP 333M</td> <td>Unknown</td> <td></td> <td>71</td> </tr> <tr> <td>ATP 415M</td> <td>Broken Hill South Limited</td> <td>U</td> <td>9</td> </tr> <tr> <td>ATP 473M</td> <td>Queensland Mines Limited</td> <td>U</td> <td>84</td> </tr> <tr> <td>ATP 620M</td> <td>Eastern Copper Mines NL</td> <td>U, Cu</td> <td>15</td> </tr> <tr> <td rowspan="5">1971-1980</td> <td>ATP 727M</td> <td>Pioneer Mining & Exploration Pty Ltd</td> <td>Au</td> <td>11</td> </tr> <tr> <td>ATP 967M</td> <td>Esso Australia Limited</td> <td>U</td> <td>5</td> </tr> <tr> <td>ATP 1132M</td> <td>Exoil NL</td> <td>Be</td> <td>5</td> </tr> <tr> <td>ATP 1193M</td> <td>Savage Exploration Pty Ltd</td> <td>U</td> <td>6</td> </tr> <tr> <td>ATP 1443M</td> <td>Carpentaria Exploration Co Pty Ltd</td> <td>Cu, Pb, Zn</td> <td>1</td> </tr> <tr> <td rowspan="4">1981-1990</td> <td>EPM 1975</td> <td>Urangesellschaft Australia Pty Ltd</td> <td>U</td> <td>1</td> </tr> <tr> <td>EPM 4867</td> <td>Stockdale Prospecting Limited</td> <td>Au</td> <td>1</td> </tr> <tr> <td>EPM 5858</td> <td>Homestake Australia Limited</td> <td>Au</td> <td>8</td> </tr> <tr> <td>EPM 7674</td> <td>Eastern Copper Mines NL</td> <td>Cu-Au</td> <td>4</td> </tr> <tr> <td rowspan="4">1991-2000</td> <td>EPM 7866</td> <td>Granite Resources Limited</td> <td>Granite</td> <td>7</td> </tr> <tr> <td>EPM 7966</td> <td>Dacca Pty Limited</td> <td>Unknown</td> <td>5</td> </tr> <tr> <td>EPM 9566</td> <td>Mount Isa Mines Ltd</td> <td>Cu, Pb, Zn</td> <td>5</td> </tr> <tr> <td>EPM 10870</td> <td>WMC Resources Ltd</td> <td>Cu</td> <td>6</td> </tr> <tr> <td rowspan="3">2001-2010</td> <td>EPM 9585</td> <td>Mount Isa Mines Ltd/Xstrata Copper</td> <td>Cu</td> <td>6</td> </tr> <tr> <td>EPM 14368</td> <td>Universal Resources Limited</td> <td>Pb, Zn, Cu</td> <td>61</td> </tr> <tr> <td>EPM 16056</td> <td>Red Metal Limited</td> <td>Cu, Au, U</td> <td>7</td> </tr> <tr> <td rowspan="4">After 2010</td> <td>EPM 11524</td> <td>Mount Isa Mines Ltd/Xstrata Copper</td> <td>Cu</td> <td>1</td> </tr> <tr> <td>EPM 11898</td> <td>Summit Resources Pty Ltd</td> <td>Pb, Zn, Cu</td> <td>21</td> </tr> <tr> <td>EPM 15411</td> <td>Mount Isa Mines Limited</td> <td>Cu-Au</td> <td>2</td> </tr> <tr> <td>EPM 19852</td> <td>Red Metal Limited</td> <td></td> <td>31</td> </tr> </tbody> </table> <p>No silica exploration is known to have been carried out previously by other parties within the current EPM prior to 2015.</p>	Year	Prospect	Company	Mineralisation	% Overlap	1961-1970	ATP 333M	Unknown		71	ATP 415M	Broken Hill South Limited	U	9	ATP 473M	Queensland Mines Limited	U	84	ATP 620M	Eastern Copper Mines NL	U, Cu	15	1971-1980	ATP 727M	Pioneer Mining & Exploration Pty Ltd	Au	11	ATP 967M	Esso Australia Limited	U	5	ATP 1132M	Exoil NL	Be	5	ATP 1193M	Savage Exploration Pty Ltd	U	6	ATP 1443M	Carpentaria Exploration Co Pty Ltd	Cu, Pb, Zn	1	1981-1990	EPM 1975	Urangesellschaft Australia Pty Ltd	U	1	EPM 4867	Stockdale Prospecting Limited	Au	1	EPM 5858	Homestake Australia Limited	Au	8	EPM 7674	Eastern Copper Mines NL	Cu-Au	4	1991-2000	EPM 7866	Granite Resources Limited	Granite	7	EPM 7966	Dacca Pty Limited	Unknown	5	EPM 9566	Mount Isa Mines Ltd	Cu, Pb, Zn	5	EPM 10870	WMC Resources Ltd	Cu	6	2001-2010	EPM 9585	Mount Isa Mines Ltd/Xstrata Copper	Cu	6	EPM 14368	Universal Resources Limited	Pb, Zn, Cu	61	EPM 16056	Red Metal Limited	Cu, Au, U	7	After 2010	EPM 11524	Mount Isa Mines Ltd/Xstrata Copper	Cu	1	EPM 11898	Summit Resources Pty Ltd	Pb, Zn, Cu	21	EPM 15411	Mount Isa Mines Limited	Cu-Au	2	EPM 19852	Red Metal Limited		31
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<p>Geology</p> <ul style="list-style-type: none"> • Deposit type, geological setting and style of mineralisation. 	<p>The field mapping and sampling report describes the reefs as complex polyphase quartz reefs that probably formed in a near-surface epithermal environment in phyllite, schist, meta-gabbro, pegmatite, and gneiss. The quartz ore bodies are measured to be steeply dipping (~75-80 degrees) down up to 25m. Strikes vary between 315-345 degrees (northwest to north-northwest). Foliation or remanent bedding in the schists and phyllite country rock trends east - west. A geological map is given in the figure below:</p> 
<p>Drill Hole Information</p> <ul style="list-style-type: none"> • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> ○ easting and northing of the drill hole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	<p>No existing drilling for hard rock quartz in EPM 25894, but two (2) HQ Diamond core holes to shallow depths were completed in 2015 at the adjacent Iceberg Reef (ML100075).</p>
<p>Data Aggregation Methods</p>	<p>No data aggregation methods were employed.</p>

<ul style="list-style-type: none"> • In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated. • Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
<p>Relationship between Mineralisation Widths and Intercept Lengths</p> <ul style="list-style-type: none"> • These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	<p>The quartz reefs are vertically orientated and rise from about 1m to about 36m above the ground and strike in an approximate north-west – southeast direction. As only surface rock chips were collected, there is no information yet on the sub-surface thickness, orientation, or total spatial extent of the potential quartz bodies. However, as Guns Knob has been mined (approx. 40,000t removed) relationships with the surrounding country rock (pegmatite) contact are clearly visible. Here the quartz blow is dipping only 55 degrees to the west, striking 315 degrees; with clear evidence of extension downdip of >10m</p>
<p>Diagrams</p> <ul style="list-style-type: none"> • Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views 	<p>Scaled, located maps annotated with numbered sample locations are provided in the text.</p>
<p>Balanced Reporting</p> <ul style="list-style-type: none"> • Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced, to avoid misleading reporting of Exploration Results. 	<p>All available assay data was utilized.</p>
<p>Other Substantive Exploration Data</p> <ul style="list-style-type: none"> • Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances 	<p>ASTER mineral mapping tiles were available for quartz and silica index and were initially used to target the quartz reefs, but their 90m pixel size is too coarse to definitively map bodies only 10-20m wide.</p> <p>Better use was made of Bing Maps and Google Earth Pro images of the area due to the contrast between the white colour of the reefs on the imagery compared to the brown and red soils of the metamorphic country rock. A total of at least eighty (80) reefs can be distinguished using this technique</p>
<p>Further Work</p> <ul style="list-style-type: none"> • The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	<p>Further work is recommended and includes</p> <ul style="list-style-type: none"> • Additional mapping and sampling of the reefs outlined in the Exploration Target table as several have potential to contain substantial tonnages. • A limited drilling campaign into the selected high purity quartz reefs is required to confirm that the outcropping portion of the reef which has visual identifiable resources, does extend to depth. A typical borehole configuration is shown below: <div data-bbox="890 1570 1142 1765" data-label="Image">  </div> <p>A Scoping Study to assess economic potential should be commenced.</p>

SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
<p>Database Integrity</p> <ul style="list-style-type: none"> Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used. 	<p>All field data is manually collected, entered to excel spreadsheets, and validated. Hard copies are stored in the local office and electronic data is stored on the company's server. Spatial data is imported into several different GIS software packages for processing. Data validation included checking for out-of-range assay data.</p>
<p>Site Visits</p> <ul style="list-style-type: none"> Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	<p>Two site visits to the May Downs Project area have been undertaken by the independent consultant (Competent Person for the Mineral Resource estimate) in March 2016 and May 2019.</p> <p>The Competent Person has completed the quartz reefs mapping measurements personally.</p>
<p>Geological Interpretation</p> <ul style="list-style-type: none"> Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	<p>The level of confidence in the interpretations of the mineralised domains is reflected by the Mineral Resource classification. Alternative geological interpretations may be developed with further drilling. In the Competent Person's opinion, they would not significantly affect the global resource estimate, but could affect local estimates.</p> <p>There are no alternative detailed interpretations of geology using the current data.</p> <p>The main mineralisation domains were defined using surface measurements of the outcropping portions of the quartz reefs and samples testing results on quartz quality.</p>
<p>Dimensions</p> <ul style="list-style-type: none"> The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource. 	<p>There are seven main ore bodies identified: Guns Knob, Reef 1, Reef 2, Reef 2A, Reef 3 and Reef 3A, and Reef 4. There four more relatively large bodies, and a further thirty (30) reefs included in the Exploration Target.</p> <p>The visible part of Guns Knob reef strikes from NW to SE direction for approximately 128m, with average width of 25m. It rises up to 36m high above the ground level. The ore body dips in SW direction, dipping angle is 55 degrees.</p> <p>The visible part of Reef 1 strikes from N to SE direction for approximately 85 m, with average width of 8 m. It rises in average for 6m above the ground level. The ore body dips in east direction, the angle is 85 degrees.</p> <p>The Reef 2 and Reef 2a extend from NW to SE direction for approximately 79m and 60m, respectively. Average width is 7m. The reefs are about 0.5 – 1 m high. The ore bodies dip in NE direction, dipping angle is 75 degrees.</p> <p>The Reef 3 and Reef 3A extend from N to S direction for approximately 130m and 46m, respectively. Average width is 25m for reef 3 and 20m for reef 3a. The reefs are about 1.5m high. The ore bodies dip in W direction, dipping angle is 70 degrees.</p> <p>As all reefs are vertically or near-vertically orientated and rise from about 1m to about 36m above the surrounding, it can be confidently predicted that the reef will persist to at least 30m below the current land surface based on results of nearby drilling.</p>

Estimation and Modelling Techniques
<ul style="list-style-type: none"> The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

The tonnage was estimated based on measurements undertaken for visible parts of the ore bodies.

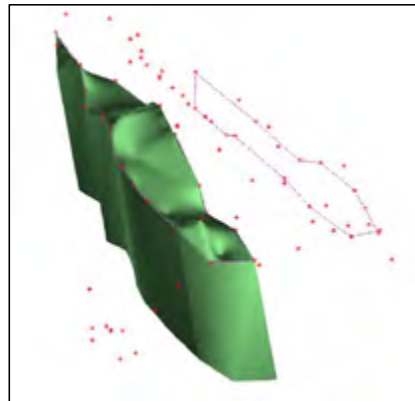
The Minescape v5.12 software package was used to create enclosed solid bodies (wireframes), based on the mapped topography and assumption that quartz reefs extend variably 5-30m below the current land surface.

Measured Mineral Resources were defined by the outcropping portion of quartz reefs that were 15m either side of the bulk sample. They have been drone surveyed with the current topography level as a lower boundary.

The Indicated Mineral Resources were defined by the outcropping portion of quartz reefs, with sampling and drone survey, the current topography level as a lower boundary.

Because the perimeter of each quartz reef was in parts, obscured by quartz scree, the final "as modelled" extent was reduced by 3m.

The Inferred Mineral Resources had been defined as a prism between the current land surface level (prism's top) and extended 25m down below the current surface (prism's bottom). A typical quartz reef wireframe is shown in the figure below:



Moisture
<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.

Because of the high purity of the quartz reefs, there is very little moisture from in the quartz and any mineral impurities with both Loss on Ignition and moisture components returning extremely low values as shown in the table, below.

REEF ID	Easting GDA94_Z54	Northing GDA94_Z54	Sample ID	QA-GRA05 LOI (1000°C) %	QA-GRA10 H2O %
WT_REEF	327142.0	7701370.0	WTR_Q1A	0.06	0.03
WT_REEF	327280.0	7702585.0	WTR_Q1B	0.05	0.02
WT_REEF	327940.0	7702876.0	WTR_Q1C	0.05	0.01
GUNS_KNOB	329780.6	7714674.4	GK_A1A	0.06	0.01
GUNS_KNOB	329780.6	7714674.4	GK_A1B	0.05	0.01
REEF_3	333523.0	7716876.7	A3_2	0.05	0.02
GUNS_KNOB	329807.5	7714685.3	GK01_1601	0.04	
REEF_2	334877.7	7715004.8	QB02_1601	0.05	
REEF_3	333930.2	7716866.3	QB03_1601	0.08	
GUNS_KNOB	329789.0	7714671.0	94385	0.04	
GUNS_KNOB	329763.0	7714684.0	94386	0.07	
REEF_2	334868.0	7715029.0	94387	0.07	
REEF_2	334882.0	7715005.0	94388	0.05	
REEF_2	334888.0	7714992.0	94389	0.06	
REEF_1	334604.0	7715028.0	94390	0.08	
REEF_1	334600.0	7715047.0	94391	0.05	
REEF_1	334598.0	7715065.0	94392	0.10	
REEF_1A	334640.0	7715065.0	94393	0.06	
REEF_4	334551.0	7714779.0	94394	0.05	
REEF_6	334177.0	7714452.0	94395	0.06	

Cut-off Parameters
<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied.

There is no cut-off grade applied, as each reef wireframed was assigned a silica content based on a weighted average of the local assay, with weight given to the bulk sample result.



<p>Mining Factors or Assumptions</p> <ul style="list-style-type: none"> Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	<p>Planned mining is a simple quarry operation with lump quartz sent from Mount Isa to Townsville for export to offshore markets. No beneficiation is planned to take place in Australia.</p>																														
<p>Metallurgical Factors or Assumptions</p> <ul style="list-style-type: none"> The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. 	<p>A proposed extraction plan for the Raw HPQ resources within ML100124 is based on developing a small size open pit capable of producing 5,000 tonnes per annum of crushed lumped material over a period of 5 years. The mining technique used would be selective and require a trained operator to aim for the HPQ rock utilising a mechanical rock breaker and excavator. The HPQ rock would be mechanically broken down and transferred for beneficiation on site to produce crushed lump size material.</p> <p>It is envisaged that the Raw HPQ lumps would be refined off site. Conversion of raw quartz into refined high purity and high value quartz products needs advanced comminution technology. Comminution reduces raw quartz to the required product size and liberates mineral impurities. Further mechanical, physical, chemical, and thermal steps are needed to separate or dissolve the impurities to meet final quality requirements.</p> <p>Raw High Purity Quartz Justification</p> <p>Representative surface and bulk samples were taken for detailed investigation to evaluate the potential of the raw material to be processed into a high value refined product. On a ROM basis, i.e., no beneficiation, all of the quartz reefs analysed (with the exception of Reef 3), meet the specification for "Low Grade" High Purity Quartz as outlined in the tables below.</p> <table border="1" data-bbox="726 1160 1305 1288"> <thead> <tr> <th>Type or Application</th> <th>SiO₂ (minimum %)</th> <th>Other Elements (maximum %)</th> <th>Other Elements (maximum ppm)</th> <th>Market Size Mtpa</th> <th>Typical price US\$/tonne</th> </tr> </thead> <tbody> <tr> <td>'Low grade' HPQ</td> <td>99.95</td> <td>0.05</td> <td>500</td> <td>0.75</td> <td>\$300</td> </tr> </tbody> </table> <p>Source: (Tedman-Jones & Maher, 2016)</p> <table border="1" data-bbox="893 1346 1139 1608"> <thead> <tr> <th>REEF ID</th> <th>Average Raw SiO₂ % wgt</th> </tr> </thead> <tbody> <tr> <td>Reef_1</td> <td>99.931</td> </tr> <tr> <td>Reef_1A</td> <td>99.961</td> </tr> <tr> <td>Reef_2</td> <td>99.964</td> </tr> <tr> <td>Reef_3</td> <td>99.949</td> </tr> <tr> <td>REEF_4</td> <td>99.960</td> </tr> <tr> <td>REEF_6</td> <td>99.959</td> </tr> <tr> <td>GUNS_KNOB</td> <td>99.957</td> </tr> <tr> <td>WATER TANK</td> <td>99.959</td> </tr> </tbody> </table> <p>Silica values reported are not analysed but represent 100% minus the sum of the trace elements excluding the LOI, the reason being that the insitu resource of the quartz is quoted as ("air-dried").</p>	Type or Application	SiO ₂ (minimum %)	Other Elements (maximum %)	Other Elements (maximum ppm)	Market Size Mtpa	Typical price US\$/tonne	'Low grade' HPQ	99.95	0.05	500	0.75	\$300	REEF ID	Average Raw SiO ₂ % wgt	Reef_1	99.931	Reef_1A	99.961	Reef_2	99.964	Reef_3	99.949	REEF_4	99.960	REEF_6	99.959	GUNS_KNOB	99.957	WATER TANK	99.959
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<ul style="list-style-type: none"> Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. 	<p>The May Downs project is at an early stage of evaluation and environmental studies have not yet been undertaken</p>																																																																																
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<ul style="list-style-type: none"> Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	<p>An in-situ bulk density of either 2.64 or 2.65 t/m³ was applied to the resource estimate for each reef depending upon the laboratory results for relative density presented in Appendix 3. Tonnes have been estimated on an air-dried basis. The table below gives the laboratory results for relative density.</p> <table border="1" data-bbox="740 965 1283 1285"> <thead> <tr> <th>REEF ID</th> <th>Easting GDA94 Z54</th> <th>Northing GDA94 Z54</th> <th>Sample ID</th> <th>Relative Density g/cc</th> </tr> </thead> <tbody> <tr><td>Reef_3</td><td>333925.7</td><td>7716851.1</td><td>G2015WTS0266</td><td>2.64</td></tr> <tr><td>Reef_1</td><td>334598.4</td><td>7715057.4</td><td>BS1_2016</td><td>2.65</td></tr> <tr><td>Reef_2</td><td>334876.0</td><td>7715012.8</td><td>BS2_2016</td><td>2.65</td></tr> <tr><td>Reef_3</td><td>333928.3</td><td>7716855.7</td><td>BS3_2016</td><td>2.65</td></tr> <tr><td>GUNS_KNOB</td><td>329789.0</td><td>7714671.0</td><td>94385</td><td>2.64</td></tr> <tr><td>GUNS_KNOB</td><td>329763.0</td><td>7714684.0</td><td>94386</td><td>2.65</td></tr> <tr><td>REEF_2</td><td>334868.0</td><td>7715029.0</td><td>94387</td><td>2.65</td></tr> <tr><td>REEF_2</td><td>334882.0</td><td>7715005.0</td><td>94388</td><td>2.64</td></tr> <tr><td>REEF_2</td><td>334888.0</td><td>7714992.0</td><td>94389</td><td>2.65</td></tr> <tr><td>REEF_1</td><td>334604.0</td><td>7715028.0</td><td>94390</td><td>2.65</td></tr> <tr><td>REEF_1</td><td>334600.0</td><td>7715047.0</td><td>94391</td><td>2.66</td></tr> <tr><td>REEF_1</td><td>334598.0</td><td>7715065.0</td><td>94392</td><td>2.65</td></tr> <tr><td>REEF_1A</td><td>334640.0</td><td>7715065.0</td><td>94393</td><td>2.64</td></tr> <tr><td>REEF_4</td><td>334551.0</td><td>7714779.0</td><td>94394</td><td>2.65</td></tr> <tr><td>REEF_6</td><td>334177.0</td><td>7714452.0</td><td>94395</td><td>2.65</td></tr> </tbody> </table>	REEF ID	Easting GDA94 Z54	Northing GDA94 Z54	Sample ID	Relative Density g/cc	Reef_3	333925.7	7716851.1	G2015WTS0266	2.64	Reef_1	334598.4	7715057.4	BS1_2016	2.65	Reef_2	334876.0	7715012.8	BS2_2016	2.65	Reef_3	333928.3	7716855.7	BS3_2016	2.65	GUNS_KNOB	329789.0	7714671.0	94385	2.64	GUNS_KNOB	329763.0	7714684.0	94386	2.65	REEF_2	334868.0	7715029.0	94387	2.65	REEF_2	334882.0	7715005.0	94388	2.64	REEF_2	334888.0	7714992.0	94389	2.65	REEF_1	334604.0	7715028.0	94390	2.65	REEF_1	334600.0	7715047.0	94391	2.66	REEF_1	334598.0	7715065.0	94392	2.65	REEF_1A	334640.0	7715065.0	94393	2.64	REEF_4	334551.0	7714779.0	94394	2.65	REEF_6	334177.0	7714452.0	94395	2.65
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<ul style="list-style-type: none"> The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	<p>Classification for the May Downs project Mineral Resources is based upon the continuity of geology and mineralisation based on spatial measurements and collected samples testing results. Unlike most ore body modelling the quartz reefs at May Downs are relatively homogenous bodies of pure quartz and the classification is about distance away from a bulk sample site. Above ground resources are generally Measured or Indicated and below ground Inferred only until drilling confirms otherwise.</p> <p>The Mineral Resources are classified as Inferred (155,000t), Indicated (160,800t) and Measured (71,500t). The classification considers all available data and quality of the estimate and reflects the Competent Person's view of the deposit.</p> <p>A further range of 0.05- 0.9Mt of Exploration Target is estimated from the other 30 quartz reefs identified in the EPM. It should be noted that the tonnages quoted above are conceptual in nature and there has been insufficient exploration to define a quartz resource. Quartz reefs and dykes were mapped using remote sensing imagery and their extents well defined, but no assay data within the project area exists for the Exploration Target estimates.</p> <p>It is uncertain whether further exploration may lead to the reporting of a JORC-standard resource however there is some evidence to support the</p>																																																																																

	current exploration tonnage calculations, and the sufficient quartz dyke development interpreted from the remote sensing to warrant further investigation in some areas.
<p>Audits or Reviews</p> <ul style="list-style-type: none"> The results of any audits or reviews of Mineral Resource estimates. 	None undertaken.
<p>Discussion of Relative Accuracy / Confidence</p> <ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	The assigned classification of Measured, Indicated and Inferred Mineral Resources reflects the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate. Currently a relative error of 10% for Measured, 20% for Indicated and 40% for Inferred has been estimated from analysing variations in reef volume attributable to changing reef widths by 2m increments.



APPENDIX 2: RESOURCE ESTIMATE CALCULATIONS

INFERRED, INDICATED AND MEASURED

Deposit	Centre of Orebody			Avg Hgt	Area	Inferred Volume	Indicated Volume	Measured Volume	Quartz S6	Less Mining	Inferred	Indicated	Measured	LIM @ 1,000 t/c	SiO ₂	Al	Fe	Ti	Ca	K	Na	B	
	Eastng	Northng	Height																				
Reef 1	334602.3	7715041.2	372.1	5.5	488.2	120.5	506.2	1878.6	2.65	18.7	3234.325	1341.3	4988.6	0.08	99.931	76	34	10	46	25	103	0.8	
Reef 1A	334641.9	7715068.7	368.3	3	67.9	169.75	183.3	0	2.65	0	449.8375	488.7	0	0.06	99.964	150	40	20	80	10	50	0.4	
Reef 2	334882.4	7715003	382.4	7	805.6	2024	1570.6	3504.6	2.65	23	5337.1	4182	9284.2	0.06	99.964	57	8	18	31	6	10	0.4	
Reef 3	333917.1	7716848.3	368.9	9	1790.9	4477.25	7168.8	7429.2	2.65	25.5	11864.725	18997.4	18661.9	0.08	99.949	80	6	5	76	6	7	0.3	
Reef 3A	333987.9	7716913.8	373.8	3.5	812.7	2031.75	2560.1	0	2.65	0	5394.1375	6784.3	0	0.08	99.949	80	6	5	63	6	7	0.3	
Reef 4	334551.5	7714781.2	380.2	4	239.5	648.75	1012	0	2.65	0	1129.1875	2881.8	0	0.06	99.966	130	40	20	100	5	50		
Reef 6	334198.3	7714449.2	378	1.5	90.1	225.25	135.2	0	2.65	0	596.9125	358.1	0	0.06	99.959	110	70	20	100	10	10	50	
Guns Knob Quarry	329771.4	7714682.3	411.2	14	3319.1	8237.75	33690.6	14194	2.65	19045	21898.0375	77614.6	37614.1	0.05	99.957	190	44	20	50	22	52	3.5	
Reef_WT	327140.1	7701356	345	2.5	281.5	703.75	234.6	0	2.64	0	1887.9	621.6	0	0.06	99.959	150	30	30	100	20	60		
Reef_WT_N1	327258.9	7702584.5	382	3	4563.7	11409.25	4563.2	0	2.64	0	30120.42	12092.6	0	0.05	99.959	110	30	30	90	20	50		
Reef_WT_N2	327952.3	7702875	351	3	13458	33645	13456.7	0	2.64	0	88822.8	35660.1	0	0.05	99.959	110	30	30	40	10	50		
										Sub-totals	171,378.37	160,799.60	71,498.76										

EXPLORATION TARGET

Nearby Reefs

Tenure	Locality	Description	Centre of Orebody	Avg Hgt	Area	Volume	Quartz S6	In situ	Low Range	High Range			
ID	Description	Reef	Eastng	Northng	AHD	m	m ²	m ³	t	t			
EPM 25894	Guns Knob	Reef_GK_1N	329068.9	7715259		1.5	3	246	554	2.64	1,461	700	2500
EPM 25894	Guns Knob	Reef_GK_2N	328932.3	7715584		1.5	3	73	164	2.64	434	200	700
EPM 25894	Guns Knob	Reef_GK_3N	328980.7	7715637		1.5	3	97	218	2.64	576	300	800
EPM 25894	Guns Knob	Reef_GK_4N	329065.6	7715708		1.5	3	60.5	136	2.64	359	200	500
EPM 25894	Guns Knob	Reef_GK_1S	330057.7	7714390		2	3	512.6	1,282	2.64	3,383	1500	6,000
ML 100124	Telegraph Road	Reef_1B	334749.9	7714882		3.5	5	122.7	521	2.64	1,377	750	2,000
ML 100124	Telegraph Road	Reef_2A	334913.7	7715010		3	10	440.7	2,855	2.64	7,582	3800	12,000
ML 100124	Telegraph Road	Reef_2B	334864.9	7714959		2.5	3	45.5	125	2.64	330	150	500
ML 100124	Telegraph Road	Reef_2C	335063.3	7714864		1.5	3	97.2	219	2.64	577	200	800
ML 100124	Telegraph Road	Reef_2D	335053.8	7714949		2.5	3	172.7	475	2.64	1,254	800	2,000
EPM 25894	Telegraph Road	Reef_4N	334511.9	7714880		1	3	68.2	136	2.64	360	100	500
EPM 25894	Telegraph Road	Reef_4S	334602.4	7714722		1	3	46.2	92	2.64	244	50	400
EPM 25894	Telegraph Road	Reef_5	334220.1	7714553		1.5	5	84.5	275	2.64	725	400	1000
EPM 25894	Telegraph Road	Reef_6N	334131	7714507		2	3	25.8	65	2.64	170	200	400
EPM 25894	May Downs	Reef_7	334219.1	7714319		1.5	5	80.8	263	2.64	693	400	1000



EPM 25894	May Downs	Reef 8	333666.5	7715220		2	3	737	1,843	2,64	4,864	2000	7,000
EPM 25894	May Downs	Reef 9	334464.6	7715514		1.5	3	293.6	661	2,64	1,744	1000	3,000
EPM 25894	May Downs	Reef 10	334034.8	7715626		1.5	3	306.5	690	2,64	1,821	1000	3,500
EPM 25894	May Downs	Reef 11	334004.6	7715941		1.5	3	275.9	621	2,64	1,639	1000	2,000
EPM 25894	May Downs	Reef 12	333921.3	7716394		1.5	3	289.5	651	2,64	1,720	1100	2,500
EPM 25894	May Downs	Reef 13	333955.9	7714706		1.5	3	286.9	646	2,64	1,704	1000	2,500
EPM 25894	May Downs	Reef 14	334749.4	7714311		2	3	252	630	2,64	1,663	1000	2,000
EPM 25894	May Downs	Reef 15	334939.3	7714593		2	5	1868.5	6,540	2,64	17,265	10000	25,000
EPM 25894	May Downs	Reef 16	33487.1	7714734		1.5	3	37	83	2,64	220	100	300
										Sub-totals	52,146	27,650	78,900

Remaining Reefs (mainly southwest and northwest EPM 25894).

Tenure	Deposit	Deposit	Easting	Northing	Number	Average Height	Average Depth	Average Area	Average Volume	Quartz SG	In situ	Low Range	High Range
ID	Length	Length				m	m	m ²	m ³	g/cc	t	t	t
"A" Reef	>2000m	width 3.10m			8	4	10	1200	67,200	2.64	177,408	100,000	350,000
"B" Reef	100-200m	width 2.4m			7	3	5	300	8,400	2.64	22,176	10,000	40,000
"C" Reef	<100	width <3m			26	1.5	3	90	5,265	2.64	13,900	8,000	2,000
					41							118,000	392,000

Notes:

- Guns Knob Quarry 487.81m² mined out removed.
- JORC Table 1 has been appended (refer to Appendix 1).
- See Appendix 2 for detailed resource calculations and Appendix 3 for assay results. All the Exploration Targets have been extended between 3m and 10m below ground.
- The laboratory air-dried densities were used to calculate gross in-situ tonnes.
- It should be noted that where Exploration Target tonnages are quoted, they are conceptual in nature and there has been insufficient exploration to define a mineral resource.
- The Exploration Targets were generated using the same methodology as the Inferred but fell outside wireframes or insufficient sampling was available.
- Based on the assays reported in the resource table at the start of Appendix 2, a conservative estimate of 99.900% SiO₂ is assigned to all Exploration Targets
- For the Exploration Target tonnages, it is uncertain whether further exploration may lead to or underlying the existing Inferred Resources.



APPENDIX 3: ASSAY ANALYSIS

Table A3-1: Sample Type: Rock Chip - Raw Trace Elements of Concern ALS-ICP64 and ALS-MEMS1 Methods

REF ID	Easting (m)	Northing (m)	Height - AHD (m)	Sample ID	Sample wt (kg)	Dispatch No	Comments	Date Analyzed	Sample ID	QA-QC GRAVS LOI	SI	LI	NI	AI	BA	CA	CR	CU	FE	K	Mg	Mn	Na	P	TI	V	Other	Other			
	GA04 254	GA04 254				Lab Sheet		Assay Reference	DESCRIPTION		ME-MS1 %	ME-MS2 %	ME-MS3 %	ME-MS4 %	ME-MS5 %	ME-MS6 %	ME-MS7 %	ME-MS8 %	ME-MS9 %	ME-MS10 %	ME-MS11 %	ME-MS12 %	ME-MS13 %	ME-MS14 %	ME-MS15 %	ME-MS16 %	ME-MS17 %	ME-MS18 %	ME-MS19 %	ME-MS20 %	
REF 1	327442.0	770370.0	330.0	GH01_1601	0.21	BR16208001	ME-CONZ is SiO2 calculated by difference. Co and V are reported as per requirement to good sample. ME-MS17 REE's may not be reported by other vendors in this assay.	1/07/2015	ME-MS1	0.01	99.954	2	<1	0.015	<10	0.010	0.001	1	0.003	0.002	<0.001	<0.001	0.004	0.006	0.003	<0.001					
REF 2	327260.0	770258.0	333.0	GH01_1601	1.43	BR16208001		1/07/2015	ME-MS1	0.02	99.968	2	<1	0.011	<10	0.009	0.004	<1	0.003	0.002	<0.001	0.007	0.003	0.004	0.003	<0.001					
REF 3	327400.0	770278.0	318.0	GH01_1601	1.80	BR16208001		1/07/2015	ME-MS1	0.050	99.968	2	<1	0.011	<10	0.004	0.001	1	0.003	0.001	<0.001	0.004	0.004	0.003	<0.001						
REF 4	327400.0	7714674.4	415.0	GH01_1601	0.80	BR16208001		1/07/2015	ME-MS1	0.060	99.949	1	1	0.017	<10	0.005	0.004	<1	0.007	0.004	0.001	<0.001	0.004	0.004	0.003	<0.001					
REF 5	329760.0	7714674.4	415.0	GH01_1601	0.80	BR16208001		1/07/2015	ME-MS1	0.050	99.965	<1	<1	0.011	<10	0.004	0.001	<1	0.006	0.003	0.001	<0.001	0.003	0.001	0.003	<0.001					
REF 6	329760.0	7714674.4	270.0	GH01_1601	0.45	BR16208001		1/07/2015	ME-MS1	0.050	99.967	<1	<1	0.009	<10	0.004	0.001	<1	0.006	0.001	<0.001	0.004	0.002	0.003	<0.001						
REF 7	329807.3	7714665.3	413.0	GH01_1601	0.44	BR16208001		1/07/2015	GH01_1601	0.04	99.976			0.009	<10	0.005	0.0007		0.001	0.001	<0.001	<0.001	0.003	0.003	0.002	<0.001					
REF 8	329877.7	7715004.6	383.0	GH02_1601	0.44	BR16208001		1/07/2015	GH02_1601	0.05	99.981			0.009	<10	0.003	0.0006		<0.001	0.001	<0.001	<0.001	0.002	<0.001	0.001	<0.001					
REF 9	330300.2	7714666.3	274.2	GH02_1601	0.21	BR16208001		1/07/2015	GH02_1601	0.08	99.956			0.013	<10	0.011	0.001		0.001	0.001	0.002	<0.001	0.006	0.004	0.001	<0.001					
REF 10	329760.0	7714671.0	416.0	GH02_1601	1.27	BR16208001		1/06/2019	GH02_1601	0.04	99.923			0.043	<10	0.008	<1		0.004	0.002	0.001	<0.001	0.013	<0.001	0.002	<0.001					
REF 11	329760.0	7714664.0	412.0	GH02_1601	1.43	BR16208001		1/06/2019	GH02_1601	0.07	99.968			0.013	<10	0.004	<1		0.004	0.001	<0.001	<0.001	0.005	<0.001	0.002	<0.001					
REF 12	329888.0	7715028.0	381.0	GH02_1601	1.80	BR16208001		1/06/2019	GH02_1601	0.07	99.978			0.009	<10	0.003	<1		0.001	<0.001	<0.001	0.003	0.001	0.002	<0.001						
REF 13	329888.0	7715005.0	384.0	GH02_1601	0.80	BR16208001		1/06/2019	GH02_1601	0.05	99.981			0.009	<10	0.003	<1		0.001	<0.001	0.001	<0.001	0.001	0.001	0.002	<0.001					
REF 14	329888.0	7714922.0	383.0	GH02_1601	1.00	BR16208001		1/06/2019	GH02_1601	0.06	99.988			0.011	<10	0.005	1		0.005	<0.001	<0.001	0.001	0.003	0.001	0.003	<0.001					
REF 15	329888.0	7715028.0	376.0	GH02_1601	0.76	BR16208001		1/06/2019	GH02_1601	0.08	99.942			0.005	<10	0.011	<1		0.004	0.004	0.002	<0.001	0.007	0.001	0.002	<0.001					
REF 16	329888.0	7715028.0	376.0	GH02_1601	0.76	BR16208001		1/06/2019	GH02_1601	0.05	99.973			0.009	<10	0.007	1		0.001	<0.001	0.002	<0.001	0.005	0.001	0.002	<0.001					
REF 17	329888.0	7715028.0	386.0	GH02_1601	1.42	BR16208001		1/06/2019	GH02_1601	0.1	99.889			0.006	<10	0.008	1		0.007	0.001	0.005	<0.001	0.019	<0.001	0.002	<0.001					
REF 18	329888.0	7715028.0	374.0	GH02_1601	0.88	BR16208001		1/06/2019	GH02_1601	0.06	99.981			0.015	<10	0.008	1		0.004	0.001	0.002	<0.001	0.005	0.001	0.002	<0.001					
REF 19	329888.0	7714725.0	381.0	GH02_1601	0.80	BR16208001		1/06/2019	GH02_1601	0.05	99.980			0.013	<10	0.010	1		0.004	<0.001	0.002	<0.001	0.005	0.001	0.002	<0.001					
REF 20	329888.0	7714662.0	380.0	GH02_1601	0.90	BR16208001		1/06/2019	GH02_1601	0.06	99.959			0.011	<10	0.010	1		0.007	0.001	0.002	<0.001	0.005	0.001	0.002	<0.001					

NOTES:

(1) Silica values are not analysed but represent 100% minus the sum of the trace elements excluding the LOI, the reason being that the in situ resource of the quartz is quoted as "air-dried".

Table A3-2: Sample Type: Rock Chip - Raw Complete Trace Elements Method ALS-MEMS1: Part 1

REF ID	Easting (m)	Northing (m)	Height - AHD (m)	Sample ID	Sample wt (kg)	Dispatch No	Comments	Date Analyzed	Sample ID	Ag	Al	As	Ba	Be	Bi	Br	Ca	Cd	Ce	Co	Cr	Cu	Cu	Fe	K	Mg	Mn	Na	P	Ti	V	Li	Mg	Mn	Mo		
	GA04 254	GA04 254				Lab Sheet		Assay Reference	DESCRIPTION	ppm	%	ppm	%	ppm	%	ppm	%	ppm	%	ppm	%	ppm	%	ppm	%	ppm	%	ppm	%	ppm	%	ppm	%	ppm	%		
REF 1	329800.2	7716666.3	274.2	GH02_1601	0.21	BR16208001	ME-CONZ is SiO2 calculated by difference. Co and V are reported as per requirement to good sample. ME-MS17 REE's may not be reported by other vendors in this assay.	1/06/2019	GH02_1601	0.01	0.010	0.5	<10	<0.05	0.16	0.01	<0.2	0.07	5	<0.05	3.7	<0.01	<0.05	<0.1	<0.005	<0.01	<0.5	0.7	<0.01	<5	0.4	<0.01	<5	0.1			
REF 2	329760.0	7714671.0	416.0	GH02_1601	1.27	BR16208001		1/06/2019	GH02_1601	0.02	<0.2	<10	<0.05	<0.01	<0.01	<0.02	0.73	1	<0.05	<0.2	<0.01	<0.05	<0.1	<0.005	<0.01	<0.5	0.7	<0.01	<5	0.4	<0.01	<5	0.1				
REF 3	329760.0	7714664.0	412.0	GH02_1601	1.43	BR16208001		1/06/2019	GH02_1601	0.01	0.4	<10	<0.05	0.04	<0.01	<0.02	0.92	1	<0.05	0.2	<0.01	<0.05	<0.1	<0.005	<0.01	<0.5	0.6	<0.01	<5	0.4	<0.01	<5	0.1				
REF 4	329888.0	7715028.0	381.0	GH02_1601	1.80	BR16208001		1/06/2019	GH02_1601	0.01	0.3	<10	<0.05	0.04	<0.01	<0.02	0.28	2	<0.05	0.8	<0.01	<0.05	<0.1	<0.005	<0.01	<0.5	0.9	<0.01	<5	0.4	<0.01	<5	0.1				
REF 5	329888.0	7715005.0	384.0	GH02_1601	0.80	BR16208001		1/06/2019	GH02_1601	0.01	0.6	<10	<0.05	0.01	<0.01	<0.02	0.22	2	<0.05	0.2	<0.01	<0.05	<0.1	<0.005	<0.01	<0.5	0.8	<0.01	<5	0.4	<0.01	<5	0.1				
REF 6	329888.0	7714922.0	383.0	GH02_1601	1.00	BR16208001		1/06/2019	GH02_1601	0.01	0.3	<10	<0.05	0.01	<0.01	<0.02	0.33	2	<0.05	0.8	<0.01	<0.05	<0.1	<0.005	<0.01	<0.5	0.8	<0.01	<5	0.4	<0.01	<5	0.1				
REF 7	329888.0	7715028.0	376.0	GH02_1601	0.76	BR16208001		1/06/2019	GH02_1601	0.01	0.1	<10	<0.05	0.02	0.01	<0.02	0.32	1	<0.05	1.4	<0.01	<0.05	<0.1	<0.005	<0.01	<0.5	0.8	<0.01	<5	0.4	<0.01	<5	0.1				
REF 8	329888.0	7715028.0	376.0	GH02_1601	0.76	BR16208001		1/06/2019	GH02_1601	0.01	0.5	<10	<0.05	0.01	<0.01	<0.02	0.15	1	<0.05	0.9	<0.01	<0.05	<0.1	<0.005	<0.01	<0.5	0.8	<0.01	<5	0.4	<0.01	<5	0.1				
REF 9	329888.0	7715028.0	386.0	GH02_1601	1.42	BR16208001		1/06/2019	GH02_1601	0.02	0.4	<10	<0.05	0.02	0.03	<0.02	0.17	1	<0.05	0.4	<0.01	<0.05	<0.1	<0.005	<0.01	<0.5	0.7	<0.01	<5	0.4	<0.01	<5	0.1				
REF 10	329888.0	7715028.0	374.0	GH02_1601	0.88	BR16208001		1/06/2019	GH02_1601	0.01	0.6	<10	<0.05	0.02	0.01	<0.02	0.32	2	<0.05	1.1	<0.01	<0.05	<0.1	<0.005	<0.01	<0.5	0.7	<0.01	<5	0.4	<0.01	<5	0.1				
REF 11	329888.0	7714725.0	381.0	GH02_1601	0.80	BR16208001		1/06/2019	GH02_1601	0.2	0.7	<10	<0.05	0.01	<0.01																						



Table A3-3: Sample Type: Rock Chip - Raw Complete Trace Elements Method ALS-ME-M61: Part 2

REF ID	Eastng (m)	Northng (m)	Height - AHD (m)	Sample ID	Sample wt (kg)	Dispatch No	Comments	Date	Sample ID From Lab	Na	Mg	Al	P	Si	Ca	Fe	S	K	Cl	Br	Ba	Cu	Zn	As	Sr	Y	Rb	Zr	
REF 1	33490.2	771696.3	274.2	Q802_1601	0.21	BR18228858	MECONZ S 80Z Coarsest 500 micron fraction of sample in duplicate which impure Co and V to REF 3 may not be reliably available in this method.	18/10/2018	Q802_1601	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
REF 2	33487.7	771604.8	383.0	Q802_1601	0.44	BR18228858	MECONZ S 80Z Coarsest 500 micron fraction of sample in duplicate which impure Co and V to REF 3 may not be reliably available in this method.	18/10/2018	Q802_1601	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
REF 3	33490.2	771696.3	274.2	Q802_1601	0.21	BR18228858	MECONZ S 80Z Coarsest 500 micron fraction of sample in duplicate which impure Co and V to REF 3 may not be reliably available in this method.	18/10/2018	Q802_1601	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
REF 4	33487.7	771604.8	383.0	Q802_1601	0.44	BR18228858	MECONZ S 80Z Coarsest 500 micron fraction of sample in duplicate which impure Co and V to REF 3 may not be reliably available in this method.	18/10/2018	Q802_1601	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
REF 5	33490.2	771696.3	274.2	Q802_1601	0.21	BR18228858	MECONZ S 80Z Coarsest 500 micron fraction of sample in duplicate which impure Co and V to REF 3 may not be reliably available in this method.	18/10/2018	Q802_1601	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
REF 6	33487.7	771604.8	383.0	Q802_1601	0.44	BR18228858	MECONZ S 80Z Coarsest 500 micron fraction of sample in duplicate which impure Co and V to REF 3 may not be reliably available in this method.	18/10/2018	Q802_1601	<0.01	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

Table A3-4: Sample Type: Bulk Sample - Raw and Beneficiated Trace Elements - Various Methods Chinese Laboratories

REF ID	Eastng (m)	Northng (m)	Height - AHD (m)	Sample ID	Sample wt (kg)	Dispatch No	Comments	Date	Sample ID From Lab	Na	Mg	Al	P	Si	Ca	Fe	S	K	Cl	Br	Ba	Cu	Zn	As	Sr	Y	Rb	Zr			
REF 1	33490.2	771696.3	274.5	Area 1	0.05	RAW	SJ12324.1899	9/07/2015	#3	99.97				100	99.97	8.92	0.08	0.05	0.44	0.03	0.05	0.40	1.28	0.58	0.16	0.01	3.82	0.03	0.74	0.95	
REF 2	33490.2	771696.3	274.0	Area 1	0.05	WASHED	Q201WV150362	27/08/2015	(1) #1							12.86				1.03	0.02	0.09	0.86	1.21	0.17	0.29	0.02	1.98			
REF 3	33490.2	771696.3	274.0	Area 1	0.05	WASHED	Q201WV150363	27/08/2015	(2) #1							18.16					1.19	0.03	0.03	0.82	0.78	0.62	0.32	0.11	1.41		
REF 4	33488.2	771602.0	377.0	Area 1	0.05	WASHED	Q201WV150364	27/08/2015	(1) #2							47.65					2.89	0.09	0.28	2.36	1.72	0.40	0.38	0.13	17.05		
REF 5	33488.2	771602.0	377.0	Area 1	0.05	WASHED	Q201WV150365	27/08/2015	(2) #2							37.66					2.45	0.02	0.19	1.98	1.27	0.47	0.35	0.10	11.38		
REF 6	33490.4	771602.2	378.0	BS2_2016	0.10	RAW	SN170683.1995	7/06/2015	#1	99.92				99.92	02.14	0.84					26.09	0.90	4.43	6.63	1.34			8.9	0.5	9.65	
REF 7	33491.0	771612.8	378.0	BS2_2016	0.10	RAW	SN170683.1995	7/06/2015	#2	99.91				99.91	06.57	0.42					24.49	0.95	5.56	2.74	1.12			9.75	0.11	4.71	
REF 8	33492.3	771696.7	274.5	BS2_2016	0.10	RAW	SN170683.1995	7/06/2015	#3	99.90				99.90	61.98	0.44					84.15	1.41	4.6	7.02	0.98			30.41	0.18	0.05	
REF 9	33490.5	771604.5	370.0	BS1_2016	0.10	WASHED	Q201WV150365	20/10/17	#1 (1)							44.15					10.83	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.1	8.35
REF 10	33490.5	771604.5	370.0	BS1_2016	0.10	WASHED	Q201WV150366	20/10/17	#1 (2)							43.18					10.83	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.1	8.35
REF 11	33490.5	771604.5	370.0	BS2_2016	0.10	WASHED	Q201WV150366	20/10/17	#2 (1)							33.85					9.13	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.1	8.35	
REF 12	33490.5	771604.5	370.0	BS2_2016	0.10	WASHED	Q201WV150366	20/10/17	#2 (2)							31.95					8.4	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.1	8.35	
REF 13	33490.5	771604.5	370.0	BS2_2016	0.10	WASHED	Q201WV150367	20/10/17	#3 (1)							38.73					12.48	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.1	8.35	
REF 14	33490.5	771604.5	370.0	BS2_2016	0.10	WASHED	Q201WV150367	20/10/17	#3 (2)							36.83					11.4	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.1	8.35	





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Sample Description	Method	ME-MS1	ME-MS2	ME-MS3	ME-MS4	ME-MS5	ME-MS6	ME-MS7	ME-MS8	ME-MS9	ME-MS10	ME-MS11	ME-MS12	ME-MS13	ME-MS14	ME-MS15
	Units	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
STANDARDS																
BCS119-7																
Target Range - Lower Bound																
Target Range - Upper Bound																
BCS116																
Target Range - Lower Bound																
Target Range - Upper Bound																
CON90-15		4.1	0.078	2.03	10.2	11.8	1.83	824	88.3	2.78	11.8	2340	1220	2390	134.5	<0.002
Target Range - Lower Bound		3.3	0.064	1.87	10.0	9.8	1.81	710	87.8	1.83	9.5	2220	990	1240	133.0	<0.002
Target Range - Upper Bound		4.9	0.092	2.19	10.5	12.8	1.99	998	89.8	3.39	19.9	2470	1950	2590	139.0	0.008
ME-Co-6		0.4	0.177	7.72	10.8	10.5	1.11	500	41.80	1.84	21.2	660	1000	1000	181.0	0.009
Target Range - Lower Bound		0.8	0.109	0.79	11.1	28.0	1.17	687	13.80	1.79	19.0	803	830	971	175.0	0.008
Target Range - Upper Bound		0.9	0.201	9.65	10.1	10.0	1.00	919	18.70	0.79	24.8	790	1190	1148	212	0.010
RUT-CL19																
RUT-CL21																
RUT-CL23																
Target Range - Lower Bound																
Target Range - Upper Bound																
BLANKS																
BLANK																
BLANK																
Target Range - Lower Bound																
Target Range - Upper Bound																
BLANK		<0.1	<0.008	<0.01	<0.8	<0.2	<0.01	<8	<0.00	<0.01	<0.1	<0.2	<10	<0.8	<0.5	<0.002
Target Range - Lower Bound		<0.1	<0.008	<0.01	<0.8	<0.2	<0.01	<8	<0.00	<0.01	<0.1	<0.2	<10	<0.8	<0.5	<0.002
Target Range - Upper Bound		0.2	0.016	0.02	1.0	0.4	0.02	16	0.18	0.02	0.2	0.4	20	1.0	0.5	0.004
BLANK																
Target Range - Lower Bound																
Target Range - Upper Bound																

Comments: Note Co and W results not reported by ME-MS1 as these were eluted due to being contaminated by tungsten carbide impurity to the sample during milling. SCD calculated by difference.

**** See Appendix Page for comments regarding this certificate ****

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Account: MILENE

Project: EPM 25894 May Downs HQ
QC CERTIFICATE OF ANALYSIS BR19122165

Sample Description	Method	ME-MS1	ME-MS2	ME-MS3	ME-MS4	ME-MS5	ME-MS6	ME-MS7	ME-MS8	ME-MS9	ME-MS10	ME-MS11	ME-MS12	ME-MS13	ME-MS14	ME-MS15
	Units	%	ppm	ppm	ppm	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm
STANDARDS																
BCS119-2																
Target Range - Lower Bound																
Target Range - Upper Bound																
BCS118																
Target Range - Lower Bound																
Target Range - Upper Bound																
CON90-15		0.37	1.07	10.1	9	0.2	301	0.00	0.08	17.00	0.071	1.20	2.4	141	40.0	1.00
Target Range - Lower Bound		0.33	1.40	17.0	<1	2.7	288	0.04	<0.08	18.00	0.081	1.00	0.0	120	28.0	0.00
Target Range - Upper Bound		0.40	0.91	0.10	9	0.6	316	0.02	0.08	16.00	0.019	1.40	0.0	192	40.0	1.00
ME-Co-6		0.29	4.00	12.4	9	4.1	204	1.00	<0.20	18.70	0.400	1.07	5.0	100	21.0	1.07
Target Range - Lower Bound		0.27	3.88	11.1	<1	3.0	277	1.08	<0.20	17.00	0.443	0.88	4.0	87	21.0	1.00
Target Range - Upper Bound		0.30	0.36	12.7	8	4.7	229	1.01	0.18	21.4	0.002	1.20	6.2	121	20.0	0.90
RUT-CL19																
RUT-CL21																
RUT-CL23																
Target Range - Lower Bound																
Target Range - Upper Bound																
BLANKS																
BLANK																
BLANK																
Target Range - Lower Bound																
Target Range - Upper Bound																
BLANK		<0.01	<0.00	<0.1	<1	<0.2	<0.2	<0.08	<0.08	<0.01	<0.008	<0.00	<0.1	<1	<0.1	<0
Target Range - Lower Bound		<0.01	<0.00	<0.1	<1	<0.2	<0.2	<0.08	<0.08	<0.01	<0.008	<0.00	<0.1	<1	<0.1	<0
Target Range - Upper Bound		0.01	0.10	0.2	2	0.4	0.4	0.16	0.16	0.02	0.04	0.04	0.2	2	0.2	0
BLANK																
Target Range - Lower Bound																
Target Range - Upper Bound																

Comments: Note Co and W results not reported by ME-MS1 as these were eluted due to being contaminated by tungsten carbide impurity to the sample during milling. SCD calculated by difference.

**** See Appendix Page for comments regarding this certificate ****





ALS		ANALYSIS												QC		
ALS		ANALYSIS												QC		
Method Analyte Units	MLMS1	MLMS2	MLMS3	MLMS4	MLMS5	MLMS6	MLMS7	MLMS8	MLMS9	MLMS10	MLMS11	MLMS12	MLMS13	MLMS14	MLMS15	MLMS16
LOD	ppm	%	%	ppm	%	%	%	%	%	%	%	%	%	%	%	%
STANDARDS																
SC313.2	0.055	0.210	4	0.021	0.011	0.004	-0.001	0.003	0.003	-0.001						
Target Range - Lower Bound	0.062	0.214	4	0.020	0.009	0.002	-0.001	0.004	0.002	-0.001						
Upper Bound	0.074	0.208	4	0.022	0.013	0.006	0.002	0.002	0.004	0.001						
SC314	0.412	0.321	10	0.051	0.122	0.027	0.001	0.013	0.118	0.021						
Target Range - Lower Bound	0.417	0.322	10	0.044	0.117	0.028	-0.001	0.017	0.116	0.020						
Upper Bound	0.407	0.321	10	0.058	0.128	0.026	0.001	0.010	0.120	0.022						
CM400-10	147.5															
Target Range - Lower Bound	117.8															
Upper Bound	176.9															
MSD-C4	128.9															
Target Range - Lower Bound	82.2															
Upper Bound	176.9															
RUT-C11																
Target Range - Lower Bound																
Upper Bound																
RUT-C11																
Target Range - Lower Bound																
Upper Bound																
RUT-C11																
Target Range - Lower Bound																
Upper Bound																
BLANKS																
BLANK	+0.002	0.001	+1	-0.001	-0.001	+0.001	+0.001	-0.002	-0.001	+1.0	+0.001					
Target Range - Lower Bound	-0.002	-0.001	+1	-0.001	-0.001	+0.001	+0.001	-0.002	-0.001	+1.0	+0.001					
Upper Bound	+0.004	+0.002	+1	+0.001	+0.001	+0.001	+0.001	+0.001	+0.001	+1.0	+0.001					
BLANK	+0.0															
Target Range - Lower Bound	+0.0															
Upper Bound	+0.0															
BLANK	0.0															
Target Range - Lower Bound	0.0															
Upper Bound	0.0															

Comments: Note Co and W results not reported by MLMS1 as these were elevated due to being contaminated by talcstone carbide imparted to the sample during milling. SiO2 calculated by difference.

**** See Appendix Page for comments regarding this certificate ****

ALS		ANALYSIS																QC	
ALS		ANALYSIS																QC	
Method Analyte Units	MLMS1	MLMS2	MLMS3	MLMS4	MLMS5	MLMS6	MLMS7	MLMS8	MLMS9	MLMS10	MLMS11	MLMS12	MLMS13	MLMS14	MLMS15	MLMS16	MLMS17	MLMS18	
LOD	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	
DUPLICATES																			
04788	40.04	0.01	0.2	+10	40.05	+0.01	+0.01	+0.02	0.07	0	40.05	1.0	+0.01	40.05	+0.01				
Target Range - Lower Bound	+0.01	0.01	0.2	+10	+0.00	0.01	+0.01	0.02	0.08	0	+0.00	1.0	+0.01	+0.00	+0.00				
Upper Bound	80.07	0.02	0.4	20	80.10	0.02	0.02	0.04	0.06	2	80.10	1.2	0.01	80.10	0.02				

Comments: Note Co and W results not reported by MLMS1 as these were elevated due to being contaminated by talcstone carbide imparted to the sample during milling. SiO2 calculated by difference.

**** See Appendix Page for comments regarding this certificate ****





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Finalized Date: 18 June 2019
ACCOUNT: MILLINE

Project: EPM 25894 May Downs HPQ

QC CERTIFICATE OF ANALYSIS BR19122165

Sample Description	Method	MS-A001	MS-A002	MS-A003	MS-A004	MS-A005	MS-A006	MS-A007	MS-A008	MS-A009	MS-A010	MS-A011	MS-A012	MS-A013	MS-A014	MS-A015
	Units	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
DUPLICATES																
04294		+0.1	+0.000	+0.01	+0.8	0.8	+0.01	+8	+0.08	+0.01	+0.1	0.2	10	1.8	+0.1	0.000
DUP		+0.1	+0.000	+0.01	+0.8	0.8	+0.01	+8	+0.08	+0.01	+0.1	+0.2	10	1.8	+0.1	0.000
Target Range - Lower Bound		+0.1	+0.000	+0.01	+0.8	0.8	+0.01	+8	+0.08	+0.01	+0.1	+0.2	10	1.8	+0.1	0.000
Upper Bound		0.2	0.002	0.02	1.8	1.8	0.02	18	0.18	0.02	0.2	0.4	20	3.6	0.2	0.002

Comments: Note Co and W results not reported by MS-A001 as these were elevated due to being contaminated by tungsten carbide imparted to the sample during milling. SO2 calculated by difference.

**** See Appendix Page for comments regarding this certificate ****

Page: 3 - C
Total # Pages: 5 (A - E)
Plus Appendix Pages
Finalized Date: 18 June 2019
ACCOUNT: MILLINE

Project: EPM 25894 May Downs HPQ

QC CERTIFICATE OF ANALYSIS BR19122165

Sample Description	Method	MS-A001	MS-A002	MS-A003	MS-A004	MS-A005	MS-A006	MS-A007	MS-A008	MS-A009	MS-A010	MS-A011	MS-A012	MS-A013	MS-A014	MS-A015
	Units	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
DUPLICATES																
04294		+0.21	0.08	+0.1	+1	+0.2	0.0	0.08	+0.08	0.02	+0.08	+0.02	+0.1	+1	+0.1	+0
DUP		+0.21	0.16	+0.1	+1	+0.2	0.0	0.08	+0.08	0.02	+0.08	+0.02	+0.1	+1	+0.1	+0
Target Range - Lower Bound		+0.21	+0.08	+0.1	+1	+0.2	+0.0	+0.08	+0.08	0.02	+0.08	+0.02	+0.1	+1	+0.1	+0
Upper Bound		0.42	0.16	0.2	2	0.4	0.0	0.16	0.16	0.04	0.16	0.04	0.2	2	0.2	0

Comments: Note Co and W results not reported by MS-A001 as these were elevated due to being contaminated by tungsten carbide imparted to the sample during milling. SO2 calculated by difference.

**** See Appendix Page for comments regarding this certificate ****






	Australian Laboratory Services Pty Ltd 32 Strand Street Stafford Brisbane QLD 4051 Phone: +61 (0) 2943 7222 Fax: +61 (0) 2943 7218 www.alsglobal.com/geochemistry												Page: 3 - D Total F Pages: 2 (A, D) Plus Appendix Pages Finalized Date: 13 JUN 2019 Account: MILENE			
	ALS Brisbane is a NATA Accredited Testing Laboratory, Corporate Accreditation No: 825, Corporate Site No: 818												Project: EPM 25894 May Downs HPQ QC CERTIFICATE OF ANALYSIS BR19122165			
Method Analyte Units LOD	ME-M51	ME-CP4	ME-CP4	ME-CP4	ME-CP4	ME-CP4	ME-CP4	ME-CP4	ME-CP4	ME-CP4	ME-CP4	ME-CP4	ME-CP4	GA-CR03	ME-CP4	ME-CP4
Sample Description	ppm	%	%	ppm	%	%	%	%	%	%	%	%	%	%	ppm	%
	0.5	0.001	0.001	1	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	10	0.001
DUPLICATES																
44984	+0.4	0.013	0.290	1	0.004	+0.001	0.002	-0.201	0.004	0.002	+0.001	0.01	-1.0	0.001		
DUP	+0.5	0.013	0.308	1	0.005	+0.001	0.002	-0.201	0.005	0.002	+0.001	0.01	-1.0	0.001		
Target Range: Lower Bound	+0.8	0.012	0.308	1	0.002	+0.001	-0.001	-0.201	0.006	+0.001	+0.001	0.01	+1.0	+0.001		
Upper Bound	1.0	0.014	0.308	2	0.006	0.002	0.303	0.006	0.006	0.002	0.001	10	0.001			
Comments: Note Co and W results not reported by ME-M51 as these were elevated due to being contaminated by tungsten carbide imparted to the sample during milling. SiO2 calculated by difference.																
**** See Appendix Page for comments regarding this certificate ****																

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	ALS Brisbane is a NATA Accredited Testing Laboratory, Corporate Accreditation No: 825, Corporate Site No: 818												Project: EPM 25894 May Downs HPQ QC CERTIFICATE OF ANALYSIS BR19122165			
CERTIFICATE COMMENTS																
ANALYTICAL COMMENTS																
Applies to Method:	REE's may not be totally soluble in this method. ME-M51															
ACCREDITATION COMMENTS																
Applies to Method:	NATA Accreditation covers the performance of this service but does not cover the performance of ALS Brisbane Sample Preparation, Corporate Accreditation No: 825, Corporate Site No: 818. The Technical Signatory is David Jones, JCIMS Supervising Chemist ME-M51															
Applies to Method:	NATA Accreditation covers the performance of this service but does not cover the performance of ALS Brisbane Sample Preparation, Corporate Accreditation No: 825, Corporate Site No: 818. The Technical Signatory is Shaun Kenny, Laboratory Manager QA-CR03															
LABORATORY ADDRESSES																
Applies to Method:	Processed at ALS Brisbane located at: 32 Strand Street, Stafford, Brisbane, QLD, Australia. Processed at ALS Brisbane Sample Preparation at: 116 Dalca Street, Geelong, QLD 4084, Australia.															
	SAG-01	LEV-01	LOG-22	ML-COM02												
	ME-CP4	ME-M51	QA-CR03													
	PAL-23	SPL-21	WEI-21													







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Plus Appendix Pages
Finalized Date: 18-OCT-2018
This copy reported on 19-OCT-2018
Account: MILENE

QC CERTIFICATE BR18236858

Project: Yilgarn EPC25894 quartz
P.O. NO.: 6PM21896
This report is for 3 Other samples submitted to our lab in Brisbane, QLD, Australia on
24-SEP-2018.
The following have access to data associated with this certificate.
MARK BOGS

SAMPLE PREPARATION

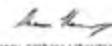
ALS CODE	DESCRIPTION
WB-21	Received Sample Weight
LEV-01	Waste Disposal Levy
BAG-01	Bulk Moistur for storage
SPL-21	Split sample - riffle splitter
LOG-22	Sample log-in - KOD wire barcode
PLU-33	Pulverize in Tungsten Carbide


ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	ICP AID	WST SUQ
ME MS81	46 element four acid ICP MS		
ME COM2	Various Elements in Cores		
ME KCH8	Method for silica sample sand		
QA-CRA05	Leach of Silicon at 500C		

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.
**** See Appendix Page for comments regarding this certificate ****

Comments: ME COM2 is SiO2 calculated by difference. Co and W removed from ME MS61 due to requirement to grind sample in tungsten carbide, which imparts Co and W to the samples.

Signature: 
Shaun Karmy, Brisbane Laboratory Manager



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Page: 2 - A
Total # Pages: 3 (A - D)
Plus Appendix Pages
Finalized Date: 18-OCT-2018
Account: MILENE

QC CERTIFICATE OF ANALYSIS BR18236858

Project: Yilgarn EPC25894 quartz

Sample Description	Method Analyte Units LOG	ME COM1	ME COM2	ME COM3	ME COM4	ME COM5	ME COM6	ME COM7	ME COM8	ME COM9	ME COM10	ME COM11	ME COM12	ME COM13	ME COM14	ME COM15	ME COM16	ME COM17	ME COM18	
		%	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	
STANDARDS																				
BC3219-2		0.290	0.015	0.0009	0.020	0.011	0.009	0.0091	0.308	0.019	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Target Range:	Lower Bound	0.282	0.014	0.0008	0.020	0.009	0.008	0.0082	0.300	0.018	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
	Upper Bound	0.298	0.016	0.0009	0.020	0.013	0.010	0.0098	0.316	0.020	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
BC3110		0.094	0.023	0.0013	0.054	0.128	0.028	0.001	0.005	0.113	0.001									
Target Range:	Lower Bound	0.077	0.022	0.0014	0.064	0.117	0.028	0.001	0.004	0.107	0.001									
	Upper Bound	0.091	0.027	0.0009	0.045	0.139	0.032	0.001	0.006	0.119	0.002									
COM20-10												2.180	1.480	19.0	1.00	1.40				
Target Range:	Lower Bound											2.00	0.90	18.0	0.90	1.20				
	Upper Bound											2.30	2.04	21.0	1.30	1.60				
MS6000												4.20	6.40	22.0	10.0	2.10				
Target Range:	Lower Bound											3.00	6.04	20.0	10.0	2.00				
	Upper Bound											5.00	6.74	24.0	12.0	2.20				
BLANKS																				
BLANK		-0.002	-0.001	-0.0001	-0.001	-0.001	-0.002	-0.001	0.001	-0.001	-0.001									
Target Range:	Lower Bound	-0.002	-0.001	-0.0001	-0.001	-0.001	-0.002	-0.001	0.001	-0.001	-0.001									
	Upper Bound	-0.001	-0.001	-0.0001	-0.001	-0.001	-0.001	-0.001	0.001	-0.001	-0.001									
BLANK		0.002	0.002	0.0002	0.002	0.002	0.002	0.002	0.002	0.002	0.002									
Target Range:	Lower Bound	0.001	0.001	0.0001	0.002	0.002	0.002	0.002	0.002	0.002	0.002									
	Upper Bound	0.003	0.003	0.0003	0.003	0.003	0.003	0.003	0.003	0.003	0.003									
DUPLICATES																				
ONE3_3668		0.010	0.011	0.0010	0.001	0.001	0.002	-0.001	0.008	0.001	-0.001									
Target Range:	Lower Bound	0.010	0.011	0.0009	0.001	0.001	0.002	-0.001	0.008	0.001	-0.001									
	Upper Bound	0.010	0.012	0.0011	0.001	0.001	0.002	0.000	0.008	0.001	0.000									

Comments: ME COM2 is SiO2 calculated by difference. Co and W removed from ME MS61 due to requirement to grind sample in tungsten carbide, which imparts Co and W to the samples.
**** See Appendix Page for comments regarding this certificate ****





ALS		ALS (Brookno) is a NATA Accredited Testing Laboratory, Certificate No. 825, Corporate Site No. 018														Page 2 - B Total # Pages: 9 (A - D) Plus Appendix Pages Finalized Date: 18-OCT-2018 Account: MILENE	
ALS		ALS (Brookno) is a NATA Accredited Testing Laboratory, Certificate No. 825, Corporate Site No. 018														Page 2 - B Total # Pages: 9 (A - D) Plus Appendix Pages Finalized Date: 18-OCT-2018 Account: MILENE	
Sample Description	Method Analyte Units LOD	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1
STANDARDS																	
SC318.2	Target Range: Lower Bound																
SC318	Target Range: Lower Bound																
CONC-10	Target Range: Lower Bound	1.12	9.88	1.76	108.8	142	9.64	1042	8.82	21.8	0.22	4.1	0.276	2.18	58.9	12.0	
MC-CO-8	Target Range: Lower Bound	0.60	2.54	2.21	35.2	87	10.47	522	9.77	18.70	0.17	3.1	0.175	1.20	35.4	12.0	
BLANK	Target Range: Lower Bound	0.00	2.30	2.00	68.2	81	11.22	387	0.50	17.00	-0.00	2.8	0.100	2.70	31.1	28.0	
BLANK	Target Range: Lower Bound	0.18	2.90	2.48	91.8	101	11.90	619	4.97	21.8	0.27	3.8	0.201	3.43	36.1	38.9	
BLANKS																	
BLANK	Target Range: Lower Bound	-0.21	-0.21	-0.22	-0.21	-0.1	-0.27	0.2	-0.01	-0.07	-0.08	-0.1	-0.089	-0.01	-0.9	-0.2	
BLANK	Target Range: Lower Bound	-0.21	-0.21	-0.22	-0.21	-0.1	-0.27	0.2	-0.01	-0.07	-0.08	-0.1	-0.089	-0.01	-0.9	-0.2	
BLANK	Target Range: Lower Bound	0.02	0.02	0.04	0.02	0.2	0.18	0.8	0.00	0.19	0.10	0.2	0.040	0.32	1.0	0.4	
DUPLICATES																	
Q812.161	Target Range: Lower Bound																
DUP	Target Range: Lower Bound																

Comments: MC-CO-82 is SdO calculated by difference. Co and W removed from MC-MS1 due to requirement to grind sample in tungsten carbide, which imparts Co and W to the sample.

**** See Appendix Page for comments regarding this certificate ****

ALS		ALS (Brookno) is a NATA Accredited Testing Laboratory, Certificate No. 825, Corporate Site No. 018														Page 2 - C Total # Pages: 9 (A - D) Plus Appendix Pages Finalized Date: 18-OCT-2018 Account: MILENE	
ALS		ALS (Brookno) is a NATA Accredited Testing Laboratory, Certificate No. 825, Corporate Site No. 018														Page 2 - C Total # Pages: 9 (A - D) Plus Appendix Pages Finalized Date: 18-OCT-2018 Account: MILENE	
Sample Description	Method Analyte Units LOD	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1	MC MS1
STANDARDS																	
SC318.2	Target Range: Lower Bound																
SC318	Target Range: Lower Bound																
CONC-10	Target Range: Lower Bound	1.08	706	88.4	2.19	19.9	2360	1048	2700	119.9	-0.000	0.38	1.83	19.4	1	9.2	
MC-CO-8	Target Range: Lower Bound	1.01	710	87.9	1.89	8.0	2028	890	1843	103.9	-0.000	0.39	1.90	17.2	-11	2.7	
BLANK	Target Range: Lower Bound	1.06	895	70.9	2.36	15.9	2476	1190	2070	187.9	0.000	0.49	2.07	17.0	3	9.9	
BLANK	Target Range: Lower Bound	1.22	520	13.20	1.90	21.9	891	1030	1005	100.9	0.000	0.29	4.21	10.0	1	4.9	
BLANK	Target Range: Lower Bound	1.17	407	10.68	1.78	13.9	822	890	971	173.9	0.000	0.27	3.30	16.1	-11	3.8	
BLANK	Target Range: Lower Bound	1.45	814	16.78	0.78	23.4	1791	1196	1198	21.9	0.011	0.76	3.29	19.2	4	4.7	
BLANKS																	
BLANK	Target Range: Lower Bound	-0.21	-0.21	-0.22	-0.21	-0.1	-0.27	0.2	-0.01	-0.07	-0.08	-0.1	-0.089	-0.01	-0.9	-0.2	
BLANK	Target Range: Lower Bound	-0.21	-0.21	-0.22	-0.21	-0.1	-0.27	0.2	-0.01	-0.07	-0.08	-0.1	-0.089	-0.01	-0.9	-0.2	
BLANK	Target Range: Lower Bound	0.02	0.02	0.04	0.02	0.2	0.18	0.8	0.00	0.19	0.10	0.2	0.040	0.32	1.0	0.4	
DUPLICATES																	
Q812.160	Target Range: Lower Bound																
DUP	Target Range: Lower Bound																

Comments: MC-CO-82 is SdO calculated by difference. Co and W removed from MC-MS1 due to requirement to grind sample in tungsten carbide, which imparts Co and W to the sample.

**** See Appendix Page for comments regarding this certificate ****





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		ALS Brisbane is a NATA Accredited Testing Laboratory, Corporate Accreditation No. 825, Corporate Site No. 818.														Project: Yilgarn EPC25894 quartz QC CERTIFICATE OF ANALYSIS BR18236858	
Sample Description	Method Analyte Units LOD	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
DUPLICATES																	
ORIGINAL		0.21	0.05	0.20	22.0	8	1.76	290	0.85	10.25	0.14	1.3	0.207	0.14	15.4	7.7	
DUP		0.01	0.05	0.01	24.1	5	1.88	304	0.74	10.90	0.19	1.1	0.208	0.05	13.7	6.7	
Target Range - Lower Bound		-0.21	0.05	-0.02	22.0	4	1.87	290	0.87	10.80	0.13	1.0	-0.005	0.02	16.0	7.0	
Upper Bound		0.02	0.10	0.06	24.4	8	1.88	300	0.86	10.65	0.24	1.6	0.206	0.26	10.2	8.0	
ORIGINAL		0.02	0.75	0.05	20.7	6	0.80	897	2.05	16.45	0.19	1.4	0.208	0.28	10.0	8.6	
DUP		0.02	0.61	0.07	10.89	8	0.82	880	2.02	10.65	0.25	1.4	0.202	0.26	9.2	8.0	
Target Range - Lower Bound		-0.01	0.60	0.04	16.76	3	0.77	903	2.05	17.65	0.18	1.2	-0.006	0.34	8.8	8.0	
Upper Bound		0.03	0.85	0.06	20.5	8	0.85	879	2.72	18.05	0.19	1.6	0.202	0.70	10.0	8.6	

Comments: MG-CON02 is %CO2 calculated by difference. Co and W removed from MG-MS61 due to requirement to grind sample in tungsten carbide, which imparts Co and W to the sample.

***** See Appendix Page for comments regarding this certificate *****


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		ALS Brisbane is a NATA Accredited Testing Laboratory, Corporate Accreditation No. 825, Corporate Site No. 818.														Project: Yilgarn EPC25894 quartz QC CERTIFICATE OF ANALYSIS BR18236858	
Sample Description	Method Analyte Units LOD	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	MG MS61	
		%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
DUPLICATES																	
ORIGINAL		0.01	0.11	0.15	0.89	4.0	6.4	340	0.8	10.1	0.012	0.05	0.24	4.0	11	0.0	
DUP		0.04	0.16	0.22	0.81	4.7	6.8	340	0.7	10.3	0.012	0.05	0.24	4.2	11	0.0	
Target Range - Lower Bound		-0.17	0.06	-0.06	0.85	0.3	6.0	330	0.2	9.7	0.004	0.04	0.18	4.0	11	0.0	
Upper Bound		0.09	0.12	0.28	0.74	5.0	6.2	350	0.7	10.7	0.014	0.06	0.22	5.4	12	0.0	
ORIGINAL		0.09	0.45	0.44	0.25	4.7	0.1	1.0	7.3	54.7	0.005	0.05	0.18	4.4	1	0.0	
DUP		0.09	0.02	0.22	0.31	4.0	4.0	700	0.8	40.1	0.004	0.05	0.18	4.4	1	0.0	
Target Range - Lower Bound		0.05	0.19	0.16	0.11	4.0	4.0	670	0.8	36.2	0.004	0.02	0.18	4.0	1	0.0	
Upper Bound		0.02	0.01	0.20	0.40	4.8	0.5	770	0.8	54.0	0.007	0.06	0.24	4.7	2	0.0	

Comments: MG-CON02 is %CO2 calculated by difference. Co and W removed from MG-MS61 due to requirement to grind sample in tungsten carbide, which imparts Co and W to the sample.

***** See Appendix Page for comments regarding this certificate *****



APPENDIX 5: MODEL COMPLETION CERTIFICATE

			
MODEL COMPLETION CERTIFICATE			
Site / Project	May Downs Quartz Project		
Modeller	Mark Biggs		
Minescape Version	ABB Minescape Stratmodel and Block Model v 5.12		
Purpose of model	Structural Model and Resource Estimation		
Release Directory	D:\projects\ISAQTZ-YIL-0619		
Date completed / released	27-June-2019		
Structure Model		Comments	
Schema/s	filename	mdqtz_19m1	
Topo file/s	filename	guns_topo.dgn; telegraph_rd_topo.dgn	
Table file/s	filename	mdqtz_16k1	
Triangle file/s	filename	guns_knob.tri, reef1.tri, reef2.tri, reef2A.tri, reef3.tri, reef3A.tri, reef4.tri	
Survey file/s	filename	mdqtz_tenure.dgn, mdqtz_geology.dgn	
Model generation report	filename	mdqtz_table_run_v1.rpt	
Quality Model		Comments	
Schema/s	filename	mdqtz_assay_19	
Table files	filename	mdqtz_assay_raw	
Load table	filename		
Composite table	filename	mdqtz_assay_wash	
Washability table	filename	N/A	
Grid files	filename		
Review	Y/N	Date	By Whom
Modeller checks	Y	26/06/2019	Mark Biggs
Peer review	Y	27/06/2019	Mary Nowland
Internal audit	N		
External audit	N		



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