

AUSTRALIAN SILICA QUARTZ GROUP LIMITED

EXPLORATION AND RESEARCH UPDATE – HARDROCK HIGH PURITY QUARTZ AND SILICA



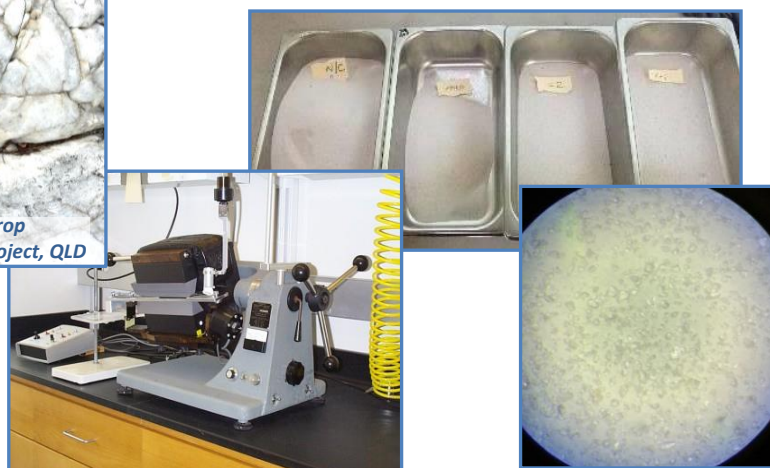
15 December 2021

HIGHLIGHTS

- Targeting high purity hard rock quartz occurrences with scale finalised after +2 year assessment of +100 high purity quartz targets throughout Australia
- ASQ holds 4 high purity quartz (HPQ) tenements (1 in WA & 3 in QLD) covering 286km² all with known visual quartz occurrences demonstrating potential to produce HPQ products
- Applications made to incorporate White Springs and Quartz Hill quartz occurrences both with historic non-JORC quartz resources into ASQ Far North Queensland tenements
- Recent testwork results indicate potential to produce HPQ products from ASQ exploration tenements
- Testwork of rock chip samples from the Lake Seabrook Project returns grades of 99.98% SiO₂
- ASQ Far North Queensland rock chip sampling by ASQ on granted tenements with results up to 99.99% SiO₂ after acid washing
- Testwork completed with innovative processing flowsheet developed by ASQ's HPQ R&D program comparing favorably to conventional processing methodology
- Exploration programs planned to evaluate quantity of identified quartz occurrences in both Western Australia and Queensland
- HPQ identified in CSIRO 2021 Critical Energy Minerals Roadmap as a mineral essential to the advancement of many technology and energy sectors
- ASQ receiving enquiries from potential HPQ customers as well as parties wishing to purchase the projects in their entirety
- Market pricing for HPQ understood to range from US\$300 to greater than US\$5,000 per tonne



Quartz outcrop
Pandanus Creek Project, QLD



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Australian Silica Quartz Group Limited (ASX:ASQ, “ASQ” or “the Company”) provides the following update on the Company’s High Purity Quartz (“HPQ”) Projects and Research and Development (“R&D”) efforts. All silica and quartz projects are held 100% by ASQ’s wholly owned subsidiary Australian Silica Quartz Pty Ltd.

ASQ have secured a number of hard rock quartz deposits in Western Australia and Queensland and the company is currently evaluating the potential to produce a high-grade lump silica or hard rock quartz product.

High Purity Quartz Market

HPQ (+99.95% SiO₂) is considered a highly specialised commodity with a low tonnage, high value market. The commodity is used in the production of:

- semi conductors
- solar panels (cover glass and silicon metal production)
- specialist technology applications

In 2021 CSIRO identified HPQ as a ‘Critical energy mineral’ in an emerging theme that is explained by the convergence of two primary mining and energy sector trends. The first, ‘critical minerals’, represents a subset of minerals that are of growing concern due to potential supply risks and projected demand increases across a wide range of applications. Separately, the transition to renewable energy is underpinned by technologies that are more critical mineral intensive than fossil fuel incumbents and are expected to undergo accelerated growth over the coming decades.

Table 1: Typical high purity quartz (silica) specifications and pricing by market

Type or Application	SiO ₂ (%)	Other Elements (%)	Market Size (Mtpa)	Typical price (US\$/tonne)
‘Low Grade’ HPQ	≥99.95	≤0.05	0.75	US\$300 - 600
‘Medium Grade’ HPQ	≥99.99	≤0.01	0.25	US\$500 - 800
‘High Grade’ HPQ*	≥99.997	≤0.003	<0.1	>US\$5,000

Modified from a table by Richard Flook and Industrial Minerals December 2013

*High grade high purity quartz, with <30ppm, is the standard is the standard high purity material produced by Unimin Corp. and TQC at Spruce Pine

Note 1: Specific other elements may be limited by application. E.g. Fe₂O₃<100ppm for solar panel cover glass

Note 2: Generally, ‘high purity’ quartz has Fe₂O₃ <15ppm, Al₂O₃ <300ppm, and alkali and alkali earth oxides <150ppm

Note 3: Limits can vary according to the composition of other raw materials in the application

Target Identification and Assessment

Over the course of +2 years ASQ has systematically identified and evaluated over 100 hardrock quartz targets throughout Western Australia and Queensland. Most have been visited on the ground by Company geologists and assessed for the potential of hosting high grade quartz deposits. The primary aim has been to identify large scale quartz occurrences that demonstrate the potential to produce HPQ products. A number of exploration tenements have been applied for and then surrendered following more detailed assessment.

Whilst the Company continues to search for additional high quality hardrock quartz occurrences, ASQ considers the current hardrock quartz tenements in both Western Australia and Queensland demonstrate excellent potential for development (Figure 1).

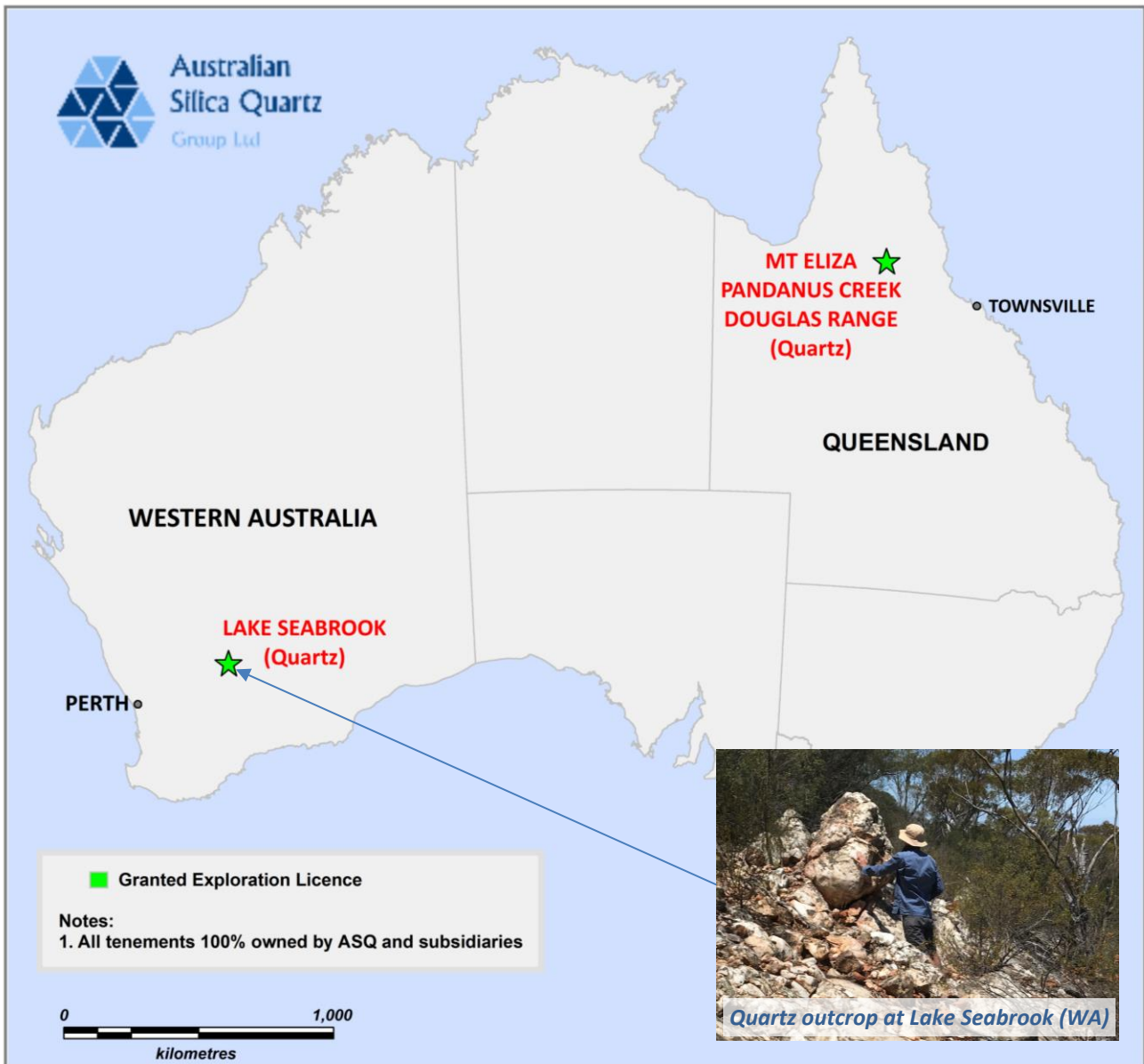


Figure 1: ASQ High Purity Quartz Project Locations

Lake Seabrook High Purity Quartz Project

The Lake Seabrook project is located on E77/2684, 42km northeast of Southern Cross in Western Australia's Yilgarn region. ASQ have identified an epithermal quartz vein system that can be traced over 5km with up to 30m true width (Figure 2). Rock chip sampling has been carried out at various locations along the occurrence and multiple rounds of lab testing completed. Conventional crushing/scrubbing/screening processing has been compared with the flow sheet ASQ has been developing though in house R&D testwork. Samples collected in a manner considered representative of real-life mining conditions have returned grades of up to 99.97% SiO₂, while a similar sample returned grades of 99.98% SiO₂ using the R&D flowsheet (Tables 1 & 2). The details of this flowsheet are currently considered commercial in confidence.

The company believes the quartz vein has potential to produce HPQ products.

The next step in evaluating the Lake Seabrook Hardrock Quartz project will be a drilling program to inform preliminary assessment of the quantity of quartz present and provide additional material for quality testing.

Environmental approval has been received from DMIRS for a reverse circulation drilling program. Before this drilling can take place, heritage surveys will need to be completed.

ASQ is also assessing the Lake Seabrook tenement for other mineralisation potential. The lease straddles a +10km section of the Youanmi Greenstone Belt at the Koolyanobbing Shear Zone. Historic exploration has been carried out for tungsten, lithium, gold and iron ore. The Company is in the process of reviewing all available historic exploration data.

Table 1: Results from conventional processing of rock chip samples from the Lake Seabrook Project

Sample	East mGDA94 Z50	North mGDA94 Z50	Conventional Crushing and Washing				Conventional Crushing, Washing and Acid Leach			
			SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	TiO ₂ (%)	SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	TiO ₂ (%)
ASQ-LS-001	746348	6580084	99.90	0.053	0.011	0.001	99.94	0.034	0.003	0.001
ASQ-LS-002	746704	6579612	99.94	0.035	0.008	0.001				
ASQ-LS-003	747225	6579310	99.94	0.022	0.012	0.001				
ASQ-LS-004	748049	6578469	99.94	0.026	0.006	0.001	99.97	0.017	<0.001	0.001
ASQ-LS-005	749038	6577387	99.93	0.031	0.007	0.001				
ASQ-LS-006	745757	6580550	99.38	0.121	0.469	0.009				
ASQ-LS-007	745794	6580566	99.93	0.023	0.019	0.001	99.97	0.018	0.001	0.001

Table 2: Results from R&D Flowsheet testing of rock chip samples from the Lake Seabrook Project

Sample	SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	TiO ₂ (%)
ASQ0012	99.980	0.0117	<0.001	<0.001

Note: ASQ0012 collected at the same location as ASQ-LS-007



Figure 2: Lake Seabrook High Purity Quartz Project – E77/2684, ASQ rock chip sampling locations and interpreted quartz vein extent

Queensland High Purity Quartz Projects

ASQ holds three granted Exploration Permits in Far North Queensland totalling over 240km². Whilst travel restrictions relating to Covid-19 have recently limited the amount of fieldwork completed on these tenements, a number of rock chip samples have been collected and analysed. The Company has identified multiple quartz occurrences with potential for HPQ products. The area is prospective for other types of mineralisation as highlighted by the recent extensive area applied for by Rio Tinto Exploration Pty Ltd (*Figure 3*). The surrounding areas have previously been explored for gold, silver, lithium, uranium and base metals. It is not known what Rio Tinto plan to explore the area for.

Table 3: ASQ Queensland high purity quartz rock chip sampling results

Sample	Project	East mGDA94 Zone 55	North mGDA94 Zone 55	SiO ₂ (%)	Al ₂ O ₃ (%)	Fe ₂ O ₃ (%)	TiO ₂ (%)
ASQ0016	Mt Eliza	208073	7997356	99.84	0.100	0.009	0.009
ASQ0017	Mt Eliza	208962	7994888	99.63	0.257	0.012	0.013
ASQ0019	Douglas Range	204018	7980466	99.95	0.020	0.016	0.001
ASQ0020	Douglas Range	203894	7979978	99.99	0.007	0.001	0.001
ASQ0021	Douglas Range	204784	7979746	99.17	0.565	0.048	0.037
ASQ0022	Pandanus Creek	166173	7978179	99.98	0.015	<0.001	0.002
ASQ0023	Mt Eliza	212680	7992521	99.98	0.013	<0.001	0.001
ASQ0024	Mt Eliza	213848	7992644	99.97	0.016	0.001	0.001
ASQ0025	Mt Eliza	219361	7994476	99.18	0.591	0.026	0.010
ASQ0026	Douglas Range	207995	7977070	99.98	0.010	0.001	0.001
ASQ0027	Douglas Range	209198	7977166	99.89	0.064	0.005	0.012
ASQ0028	Douglas Range	206679	7984756	99.98	0.008	0.001	0.001



High purity silica in lump quartz

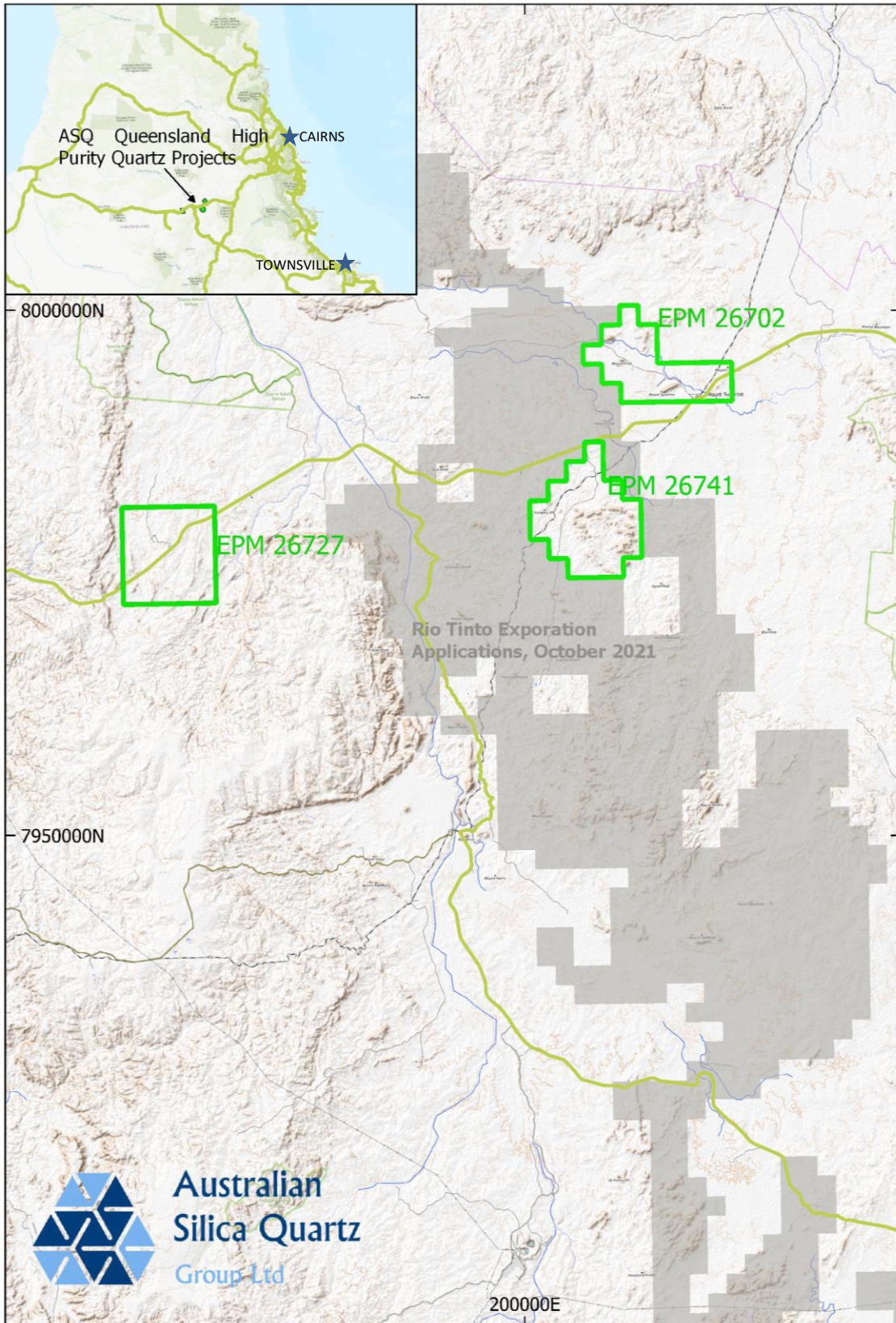


Figure 3: Locations of ASQ high purity quartz projects in Far North Queensland. Coordinates in mGDA94 Zone 55. Note extensive recent applications by Rio Tinto Exploration Pty Ltd

Mount Eliza

The Mount Eliza HPQ project is located on EPM 26702, immediately north of Mount Surprise and 280km northwest of Townsville in Far North Queensland. ASQ have identified a number of large, elevated ridges comprising epithermal quartz veins (Figures 3 & 4). ASQ have collected a number of rock chip samples within the project area. These samples have returned results up to 99.98% SiO₂ (Table 3).

At the time of application, EPM 26702 overlapped with and excluded 3 mining lease applications (ML30235, 30236 and 20237) that covered the Quartz Hill deposit which was reported by previous explorers Solar Quartz Technologies Corporation ("SQT") to contain 14 million tonnes of high-grade quartz. ASQ has not been able to verify this SQT report and readers are cautioned that ASQ cannot confirm the validity of the SQT estimate and there is significant uncertainty regarding the validity of the reported mineralisation at Quartz Hill. The SQT mining leases have subsequently lapsed and ASQ has applied to have the area incorporated into EPM 26702.

During 2022 ASQ intends to undertake detailed sampling of the identified quartz occurrences on the Mount Eliza lease and potentially complete drilling to assess the size of the deposits.

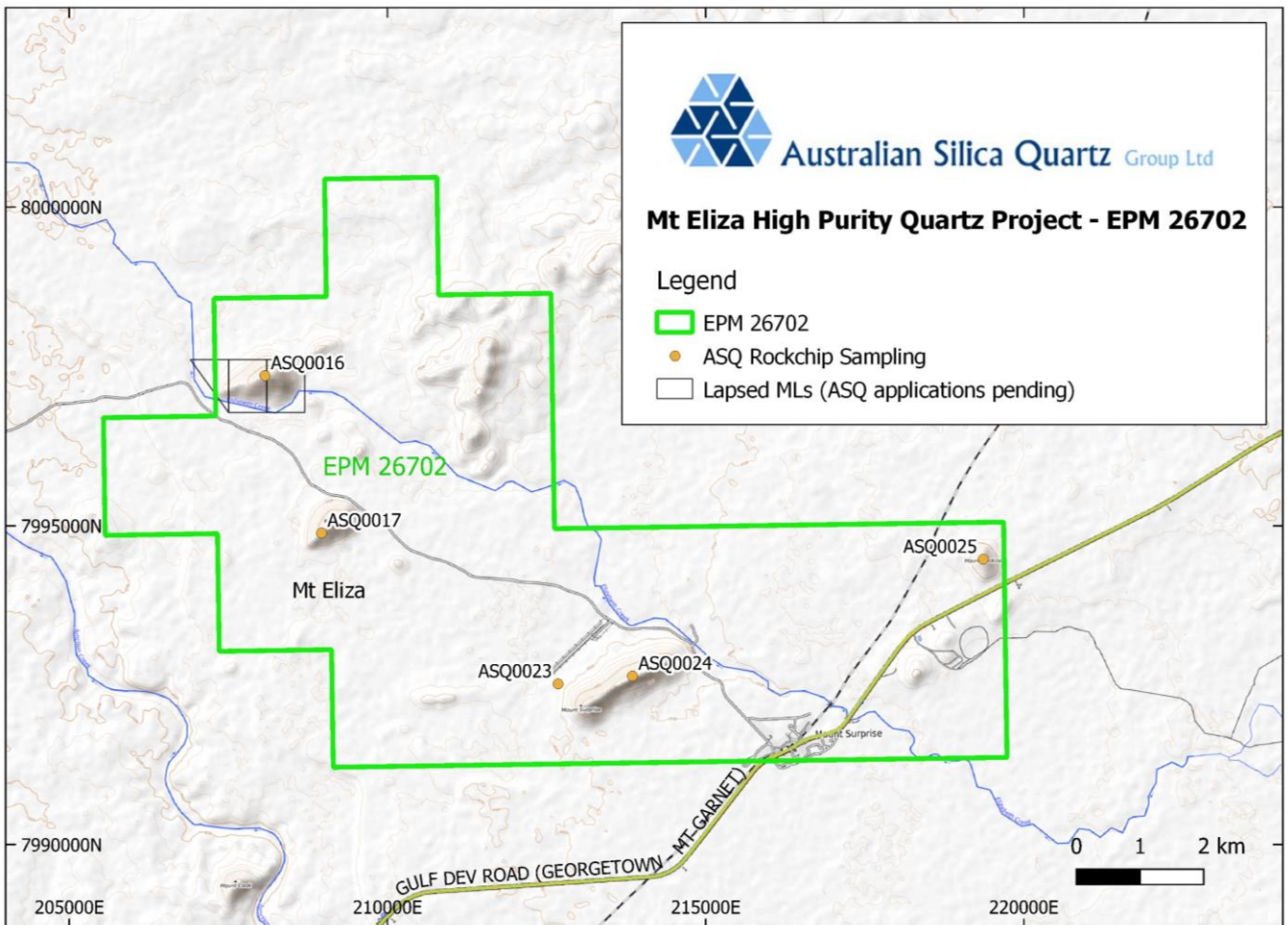


Figure 4: Mt Eliza High Purity Quartz Project – EPM 26702 with ASQ rock chip sampling locations

Pandanus Creek

The Pandanus Creek HPQ project is located on EPM 26727, 30km east of Georgetown and 320km northwest of Townsville in Far North Queensland (Figures 3 & 5).

At the time of application, EPM 26727 overlapped with and excluded 2 mining lease applications (ML30238 and 30239) that covered the White Springs quartz outcrop. The mining leases have subsequently lapsed and ASQ has made application to have the area incorporated into EPM 26727.

The White Springs outcrop comprises the central quartz core of a zoned pegmatite. The quartz is visually very clean and white. The Company has collected a single rock chip sample at White Springs which recorded 99.98% SiO₂ (Table 3) demonstrating the potential of the deposit for HPQ. Whilst the exposed outcrop size is limited to approximately 4,000m² ASQ believes there is potential for extensions under cover along with additional zoned pegmatites within the lease.

Planning is underway to complete further rock chip sampling at the site and to carryout detailed exploration targeting additional zoned pegmatites in the area.

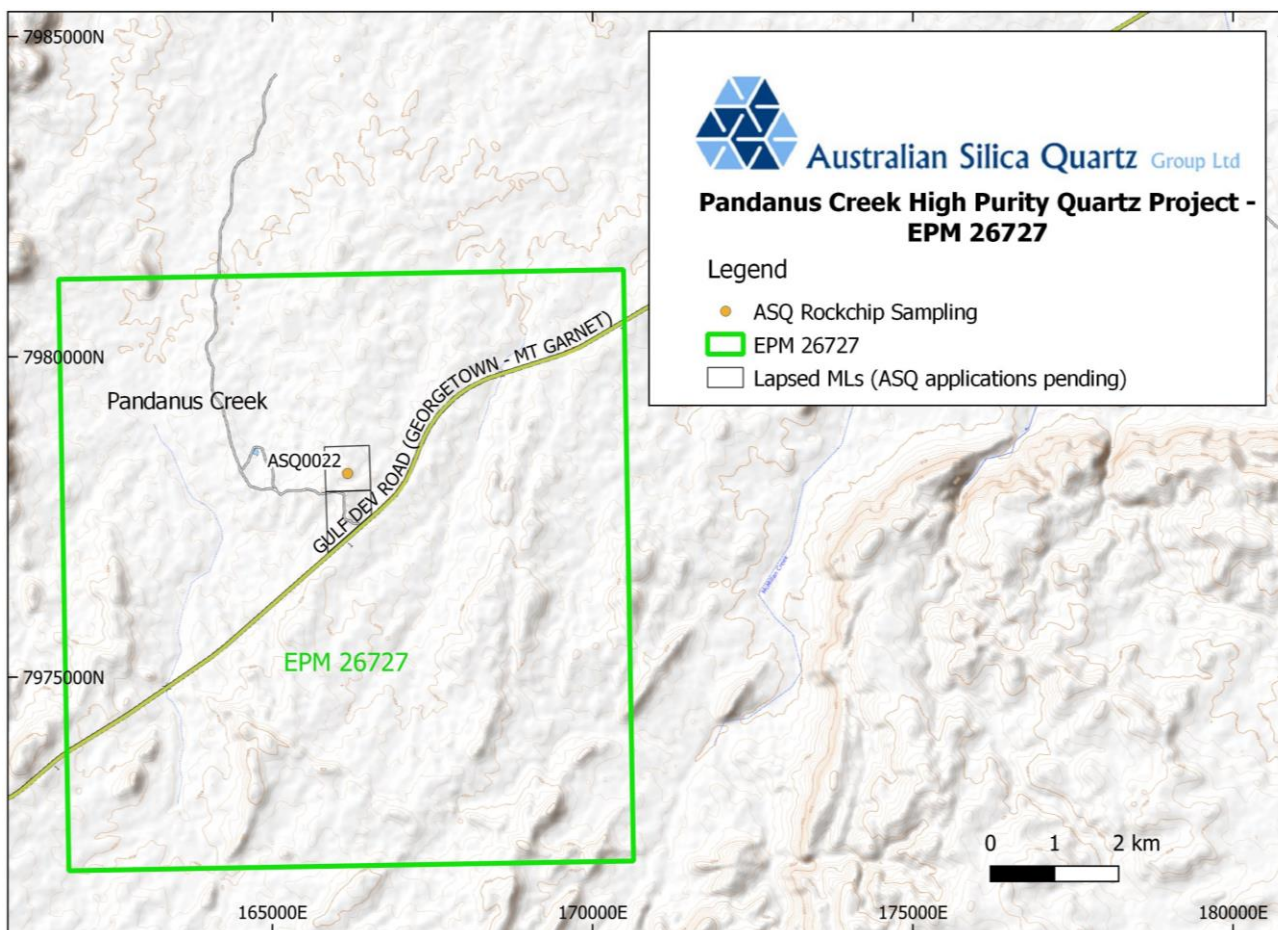


Figure 5: Pandanus Creek High Purity Quartz Project – EPM 26727 with ASQ rock chip sampling locations

Douglas Range

EPM 26741 (Douglas Range) is located 10km southwest of Mount Surprise and 280km northwest of Townsville in Far North Queensland (Figures 3 & 6). The lease contains an extensive series of elevated ridges comprising epithermal quartz veins along with a number of clean quartz outcrops on the lower areas of the lease.

ASQ have collected a number of rock chip samples within the project area. These samples have returned results up to 99.99% SiO₂ (Table 3).

During 2022 the Company plans to undertake detailed sampling of the identified quartz occurrences on the Douglas Range lease along with detailed exploration to assess the scale of the identified deposits.

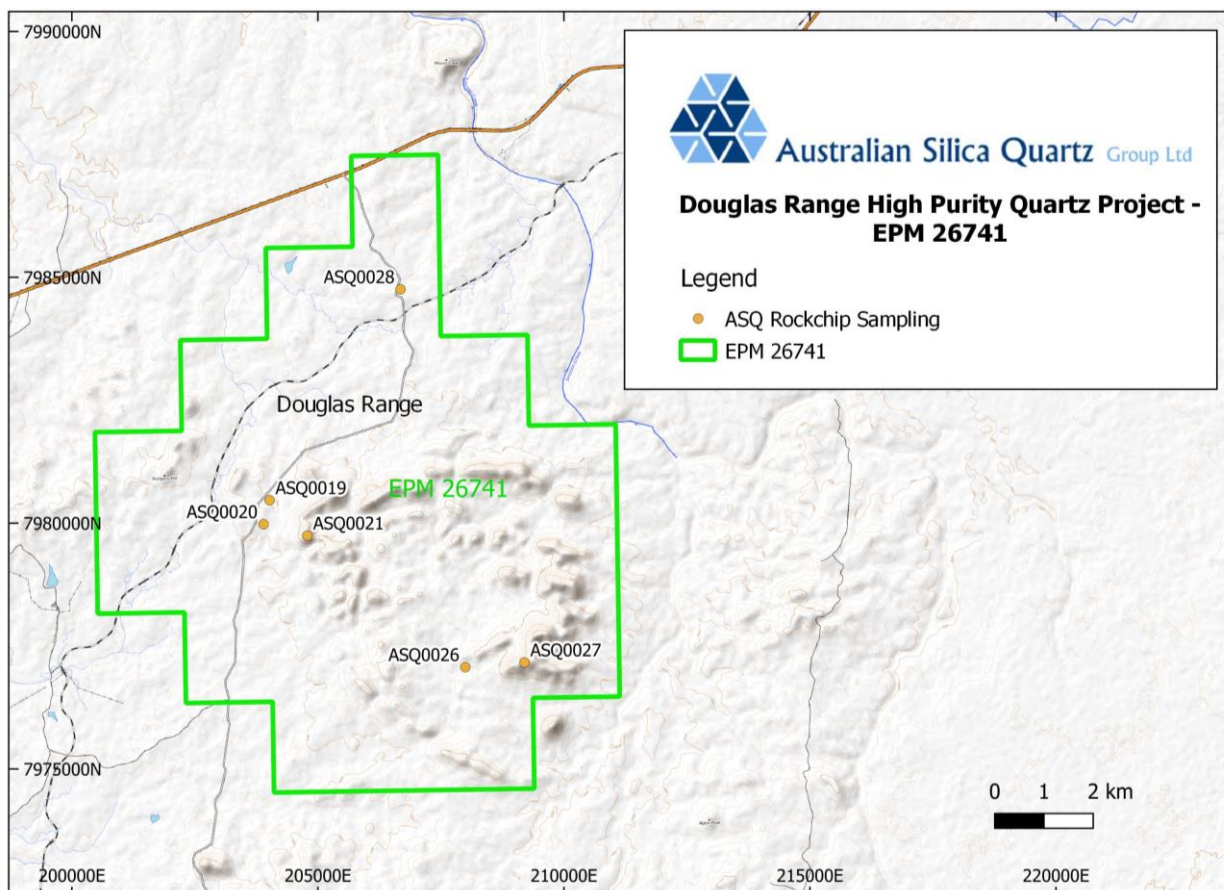


Figure 6: Douglas Range High Purity Quartz Project – EPM 26727 with ASQ rock chip sampling locations

Research and Development

ASQ has been working on developing an innovative treatment process with assistance from the Curtin University John de Laeter Research Centre and Perth based commercial analytical laboratories. The Company considers the treatments and methodology under investigation to be commercially confidential. Work to date has demonstrated there is potential to develop a treatment process that could produce HPQ at a much lower cost than the complex and intensive processing employed by the existing producers. Work to develop and refine the process flow is underway to determine scalability and refine the economics of the process. The Company's existing resources are being evaluated as to their potential as a feed stock for the process.



This announcement has been authorised for release by the Board.

Competent Persons Statement

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Nick Algie, a Competent Person who is a registered member of the Australian Institute of Mining and Metallurgy (AusIMM). Mr Algie is a full-time employee of the Company in his capacity as Technical and Exploration Manager. Mr Algie has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a competent person as defined in the 2012 edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Algie consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

This report may include forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", or other similar words and may include, without limitation, statements regarding plans, strategies, and objectives of management. Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the company's actual results, performance and achievements to differ materially from anticipated results, performance or achievements. Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control. Accordingly, readers are cautioned not to place undue reliance on forward looking statements.

About Australian Silica Quartz Group Limited

ASQ DEVEX 50/50 JV (non-dilutable at ASQ's election)

ASQ has entered into a joint venture with DevEx Resources ("DevEx" ASX:DEV) on its 100% owned E70/3405 tenement located along strike from Chalice Gold Mines ("Chalice" ASX:CHN) nickel copper platinum group elements Julimar discovery in WA. The first \$3M expenditure on the JV area is to be fully funded by DevEx to earn 50%. ASQ has the option to jointly fund future expenditure to maintain 50% share or opt to allow DevEx to fund the next \$3M to earn a further 20% share in non-bauxite minerals. Initial geochemical and geophysical exploration work returned positive results. Recently completed aircore drilling has defined a layered, differentiated mafic-ultramafic intrusion, extending over 12 kilometres in length. (refer full detail in the 1 June 2020 announcement *ASQ reaches agreement for funding of exploration on its tenement in Julimar Region, WA*, 8 October 2020 announcement *Update on Geophysics Targets at ASQ/DevEx JV in Julimar Region, WA*, 19 August 2020 announcement *Update on ASQ/DevEx 50/50 JV in Julimar Region, WA*, 4 December 2020 announcement *DevEx Exploration Update*, 27 April 2021 announcement *Drilling confirms Mafic-Ultramafic Intrusion at Sovereign* and 17 August 2021 announcement *12km Long Mafic-Ultramafic Intrusion at Sovereign, Large Scale Ground EM and Diamond Drilling set to Commence*)

SILICA

ASQ has established a range of silica sand and hardrock projects held via exploration licence applications 100% owned by ASQ's subsidiary Australian Silica Quartz Pty Ltd. These projects now consist of 10 granted exploration licences and 6 applications covering approximately 1,500 km² within Western Australia and Queensland.

High grade silica (99.5-99.9% SiO₂) and high purity silica (>99.95% SiO₂) currently have a wide range of applications. All indications suggest the high grade and high purity silica market is currently growing strongly due to greater demand from the PV Solar, TFT glass, Electronics, Flat Glass and Speciality Glass industries. This is reinforced by the level of enquiries received from qualified end user customers the Company has received primarily from China and South East Asia.

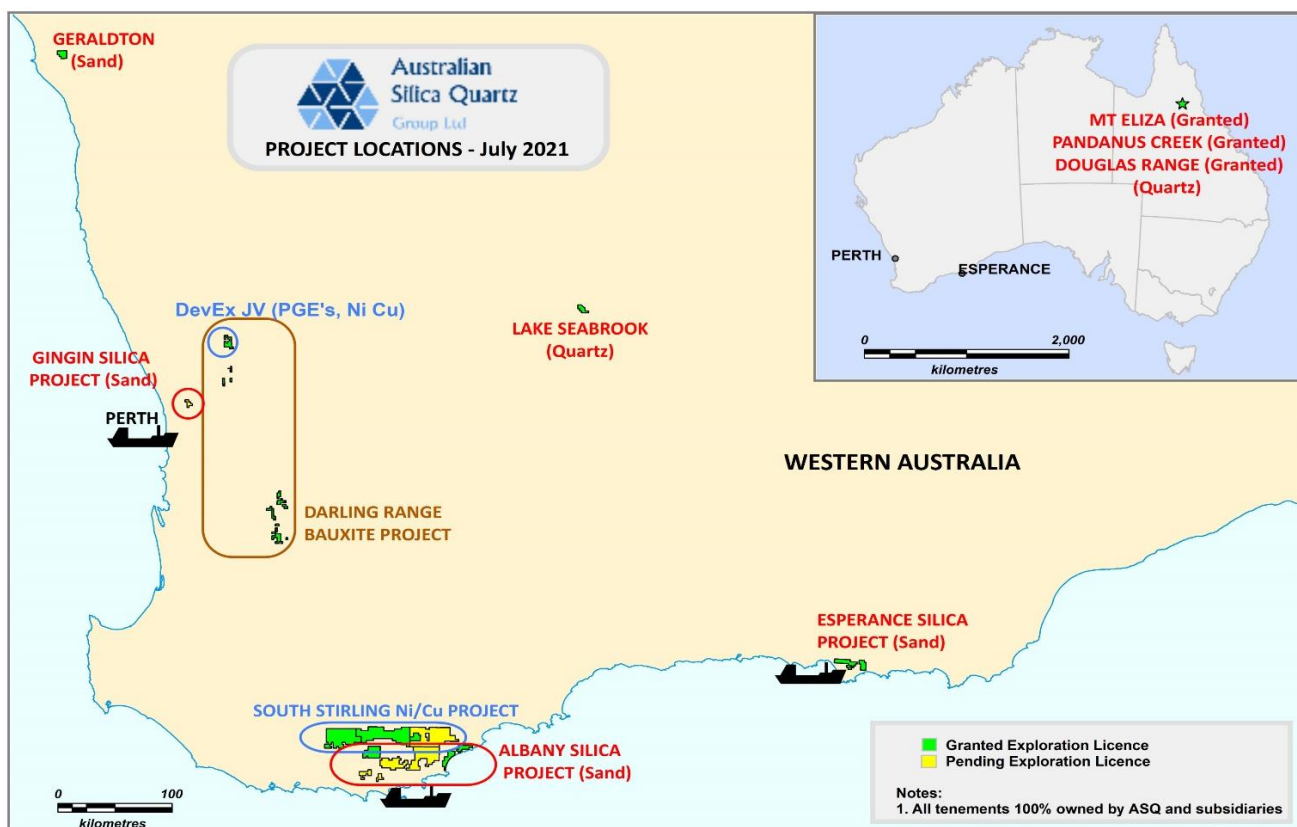
SILICA SAND

ASQ's high grade silica sand projects are located in the regions of Albany, Gingin and Esperance in the southwest of Western Australia.

In the shorter term these projects potentially present the opportunity for the Company to produce a washed DSO silica sand product with longer term potential to enter the higher value higher grade silica sand market with a niche processed product.

ASQ is currently working on a Scoping Study for the 11.6Mt Albany White Hill high grade, low iron Silica Sand Project (refer full detail in the 28 January 2021 announcement *High Grade, Low Iron Silica Sand Resource*). The Albany White Hill Project is located on farmland cleared of native vegetation 70 km east northeast of the port of Albany.

In addition to its wholly owned silica exploration projects ASQ has reached an agreement with an existing local sand producer. In 2019 the Company executed a binding terms sheet with Urban Resources Pty Ltd (Urban) to jointly exploit Urban's Silica Sand deposit located in Bullsbrook, Western Australia. Urban has operated the mine for the last six years and produced over 1Mt from the deposit in last two years. The ASQ/Urban Resources agreement presents the Company with the opportunity to potentially fast track its entry into the DSO silica sand export market. ASQ have completed a JORC 2012 Inferred Mineral Resource on the raw sand at Urban's Maralla Road tenement M70/326 (refer full detail in the 7 May 2019 announcement *Update on Maralla Road Silica Sand Deposit Maiden Resource* and 29 January 2020 announcement *Spiral and Classifier Testwork Results for the M70/326 Silica Sand Products*).



SOUTH STIRLING Ni/Cu PROJECT

ASQ has established the South Stirling Ni/Cu Project by way of four exploration lease applications lodged covering 1,603 km² over the Albany Fraser Mobile Belt, South-Western WA where the Company has identified a historic end of hole aircore drilling assay of 1.5m at 0.79% Ni, 934 ppm Cu, 832 ppm Co from 28.5m that was never followed up. ASQ considers the application area has potential for Nickel-Copper magmatic sulphide

mineralisation associated with mafic-ultramafic intrusions emplaced into granulite facies country rocks. (refer full detail in the 23 September 2020 announcement *Exploration Update*.)

BAUXITE JV

ASQ has a joint venture with HD Mining & Investments Pty Ltd (HDM). HDM is currently working towards obtaining a 40% interest in the bauxite rights of several tenements under the joint venture which are wholly owned by ASQ. Exploration activities are fully funded by HDM. Should HDM and ASQ make a subsequent decision to mine, then HDM will earn an additional 20% interest in bauxite rights on the tenements. ASQ maintains 100% interest in all other minerals. A ninety-five million tonne Bauxite JORC resource has been identified under this JV (Refer Company Annual Financial Report for 2020 - Mineral Resources and Ore Reserves section).

BAUXITE ROYALTY

Following the sale of the Bauxite Resources Joint Venture Bauxite Project to Yankuang Group a royalty on future bauxite sales from the project of 0.9% of FOB price payable to ASQ was negotiated. The Yankuang Group bauxite project contains in excess of 300 million tonnes in the world class bauxite region in the Darling Range, Western Australia. ASQ is entitled to a royalty of 0.9% of the FOB price on the first 100 million tonnes mined (under current prices of Bauxite this royalty would equate to approx. A\$0.50/tonne) (refer full detail in 30 November 2015 announcement *Final Agreements signed with Yankuang for sale of Joint Venture Interest and Buy Back of Shares*)

APPENDIX 1 - JORC 2012 Table 1

Section 1 - Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg 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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Rock Chips were collected by ASQ staff and submitted for analysis. Rock chips are random, subject to bias and often unrepresentative for the typical widths required for economic consideration. They are by nature difficult to duplicate with any acceptable form of precision or accuracy. Western Australia rock chip samples were collected across an area of around 10m² at each location with the aim of reducing sampling bias. Queensland rock chip samples were manually crushed and chips selected for analysis to TSW Analytical Laboratory by 4 Acid digest with analysis by ICP-OES. Western Australia rock chip samples were crushed to -20mm using a jaw crusher then scrubbed in a rubber lined concrete mixer before washing and wet screening to +5mm-20mm. 1-2kg subsamples of the crushed product were submitted to Intertek Genalysis laboratory for pulverisation in a zircon bowl pulveriser. Pulps were analysed by TSW Analytical laboratory by 4 Acid digest with analysis by ICP-OES.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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). 	<ul style="list-style-type: none"> No drilling was undertaken
Drill sample recovery	<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. 	<ul style="list-style-type: none"> No drilling was undertaken
Logging	<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. 	<ul style="list-style-type: none"> No drilling was undertaken
Sub-sampling techniques and sample preparation	<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- 	<ul style="list-style-type: none"> Queensland rock chip samples were manually crushed and chips selected for analysis. This method was intended to investigate the "best case" chemistry of the quartz and limit the possibility of contamination. It was not intended to be representative of mining methods. Western Australia rock chip samples were crushed to -20mm using a jaw crusher then scrubbed in a rubber lined concrete mixer

Criteria	JORC Code explanation	Commentary
	<p>sampling stages to maximise representivity of samples.</p> <ul style="list-style-type: none"> 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>before washing and wet screening to +5mm-20mm. 1-2kg subsamples of the crushed product were submitted to Intertek Genalysis laboratory for pulverisation in a zircon bowl pulveriser.</p>
Quality of assay data and laboratory tests	<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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> The samples were analysed at TSW Analytical in Perth. The samples were fully digested in a multi acid mix of Hydrofluoric, Nitric and Perchloric acids in Teflon beakers and analysed by Inductively Coupled Plasma Optical (Atomic) Emission Spectrometry. Non-certified high purity silica (99.99% SiO₂) standards were included with the submissions to TSW. The high purity standard was not certified but has been previously used by the company at multiple laboratories to determine the level of contamination by the laboratory processes.
Verification of sampling and assaying	<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. 	<ul style="list-style-type: none"> Rock chip and geological information is written in field books and coordinates and track data saved from handheld GPSs used in the field. ASQ geologists have inspected and logged all rock chips. Field data is entered into excel spreadsheets.
Location of data points	<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. 	<ul style="list-style-type: none"> All sample locations were located using GPS in MGA grid co-ordinates with the expected relative accuracy. Locations recorded in MGA94, Zone 50K co-ordinates.
Data spacing and distribution	<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. 	<ul style="list-style-type: none"> Sample spacing and distribution is not sufficient to establish the degree of geological and grade continuity appropriate for a Mineral Resource.
Orientation of data in relation to geological structure	<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. 	<ul style="list-style-type: none"> At this early stage of exploration, quartz deposit thicknesses, orientation and dips are not clear. The rock chip sampling undertaken is not considered sufficient to provide unbiased sampling of the quartz veins.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> The chain of custody is managed by ASQ. Samples were collected onsite and delivered to the laboratories ASQ geological staff.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> The sampling program and results have been reviewed by senior ASQ non-geological staff only.

Section 2 - Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<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 license to operate in the area. 	<ul style="list-style-type: none"> All Western Australia samples were collected from granted Exploration Licence E77/2684. Queensland samples were collected on Granted exploration permits EPM 26702, 26727 & 26741 Samples ASQ0016 & ASQ0022 were collected from areas on EPM 26702 & EPM 26727 that were mining permit applications at the time of ASQ's permit applications. These mining permit applications have since lapsed and ASQ has made application to have the areas included into the exploration permits. ASQ is not aware of any impediment to this inclusion proceeding. All tenements are 100% owned by Australian Silica Quartz Group Limited wholly owned subsidiaries.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> No previous exploration for silica has been recorded for the Lake Seabrook Project. There are various press reports of Solar Quartz Technologies Corporation (SQT) identifying a 14mt JORC compliant quartz resource at Quartz Hill on EPM 26702 (Mount Eliza Project) and a non-JORC 1mt quartz resource on EPM 26702 (Pandanus Creek Project) however ASQ has been unable to verify these reports.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> At the Lake Seabrook Project ASQ has identified a 5km long epithermal quartz vein lying along the southwestern margin of the Youanmi Greenstone Belt at the Koolyanobbing Shear Zone. Within the Mt Eliza (EPM 26702) and Douglas Range (EPM 26741) project areas ASQ has identified epithermal quartz veins hosted in Palaeozoic granitoid rocks. Numerous quartz veins are mapped in the 250k geological mapping and are easily identified in satellite imagery and on the ground as prominent weathering resistant quartz ridges. At Pandanus Creek (EPM 26727) SQT identified the White Springs quartz occurrence consisting of the massive quartz plug of a heavily zoned pegmatite intruded into Palaeozoic granitoid rocks. The company has identified the potential for similar deposits in the Pandanus Creek project area.
Drill hole information	<ul style="list-style-type: none"> A summary of all information material to the under-standing 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 	<ul style="list-style-type: none"> No drilling was undertaken

Criteria	JORC Code explanation	Commentary
	<i>of the report, the Competent Person should clearly explain why this is the case.</i>	
Data aggregation methods	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	<ul style="list-style-type: none"> No drilling was undertaken
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> No drilling was undertaken
Diagrams	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Relevant figures have been included within main body of this report.
Balanced Reporting	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> Exploration results are reported in full. The accompanying document is a balanced report with a suitable cautionary note.
Other substantive exploration data	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> No other exploration data other than rock chip samples have been collected at the hard rock quartz project areas.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Heritage Surveys Land access (QLD) Review of available geophysics data (EPM 26727) Assessment of potential scale including drilling where justified Metallurgical and R&D test work to refine potential processing flowsheets ongoing Review of potential for other styles of mineralisation