DIATREME Resources

ASX ANNOUNCEMENT

23 June 2026

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Diatreme's Total Silica Resource Base Now at 632.8Mt with Maiden 102.7Mt Mineral Resource Estimate at Casuarina Deposit

- **Maiden Mineral Resource Estimate (MRE) of 102.7Mt for the Casuarina Resource Area establishes a substantial new high-purity silica sand resource for Diatreme in Far North Queensland, with mineralisation contiguous to the existing Cape Flattery Silica Mine**
- **Results indicate a high-purity silica sand deposit (99.0% SiO_2) with favourable mining geometries, supporting a potentially long-life, low-strip operation**
- **Maiden MRE to form the geological basis for ongoing exploration and future technical studies at the Casuarina Resource Area**
- **Diatreme's global high-purity silica sand resource base now totals 632.8Mt across all project areas in FNQ, offering secure supply source of critical mineral key to solar energy industry**

Silica sands developer Diatreme Resources Limited (ASX:DRX) today announced a Maiden Mineral Resource Estimate (**MRE**) of 102.7 million tonnes (Mt) for its Casuarina Resource Area, part of the Company's broader silica sands portfolio in Far North Queensland. This estimate materially expands the Company's global resource base and importantly, estimates mineralisation contiguous with the existing Cape Flattery Silica Mine. Casuarina is being advanced as a distinct project within Diatreme's FNQ silica sand portfolio, on its own development pathway and separate to the Company's flagship Northern Silica Project (NSP).

Significantly, Diatreme's total silica sand resource base has now grown to 632.8Mt across all project areas, offering a secure supply source of low-iron, high-purity silica, an essential ingredient for the fast-growing solar PV industry.

The Casuarina Resource Area sits within the world-class Cape Bedford - Cape Flattery Dune Field, immediately adjacent to the Port of Cape Flattery and the Cape Flattery Silica Mine, and is well positioned to supply a variety of silica sand products. The initial model and MRE will form the geological basis for any ongoing exploration in Casuarina in coming years. The results of the MRE are provided in Table 1.

Diatreme's CEO, Neil McIntyre, commented: *"This maiden Mineral Resource Estimate is a significant milestone for Diatreme, adding a further substantial new high-purity silica sand resource to our North Queensland portfolio. With mineralisation contiguous with the established Cape Flattery Silica Mine and a location immediately adjacent to existing port infrastructure, Casuarina is exceptionally well placed.*

"We see clear scope to grow and upgrade the resource as we advance the next phase of drilling and technical studies, and we look forward to keeping the market updated as that work progresses.

"Diatreme continues to expand our silica sand resource base, positioning the Company to become a long-term supplier of low-iron, high-purity silica to the solar PV and specialty glass industries, delivering new jobs and investment for the Hope Vale/Cooktown region and increased value for shareholders."

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RESOURCE CATEGORY	SILICA SAND MT	SIO_2 %	FE_2O_3 %	TIO_2 %	AL_2O_3 %
INDICATED	61.3	99.03	0.12	0.15	0.11
INFERRED	41.4	99.06	0.10	0.12	0.10
TOTAL	**102.7**	**99.04**	**0.11**	**0.14**	**0.11**

Table 1: June 2026 Casuarina Resource Area | Breakdown by MRE Category

NEXT STEPS

The Maiden MRE establishes a substantial new resource base at Casuarina and, importantly, infers and indicates mineralisation contiguous with the existing Cape Flattery Silica Mine, a finding that has positive implications for future development. As a maiden estimate, with 40.3% of the resource classified as Inferred, the result points to clear scope to grow and upgrade the Mineral Resource through further drilling. The underlying block model incorporates both grade and optical attributes captured systematically during drilling and logging, a dataset Diatreme expects to be a valuable input into future product blending and mine schedule optimisation as the project advances.

In parallel, Diatreme will progress technical studies across the mining, processing, infrastructure and economic workstreams to evaluate development pathways for the Resource Area. Its position immediately adjacent to the established Port of Cape Flattery and the operating Cape Flattery Silica Mine offers the potential to leverage existing infrastructure and a low-capital-intensity route to development. The Maiden MRE will serve as the underlying geological and grade input to these studies, supporting initial mine design and schedule concepts.

Further metallurgical testwork will also continue to refine final product specifications and confirm suitability for photovoltaic, glassmaking and other high-purity industrial applications. These results will underpin ongoing engagement with prospective customers and support progression towards binding offtake discussions with targeted end users in the global silica sand market. Diatreme will also continue technical work at Casuarina, including infill and

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extensional drilling, sampling, geological logging and analytical programs designed to further grow and upgrade the Mineral Resource. The Company will provide further updates on the Casuarina program as work progresses.

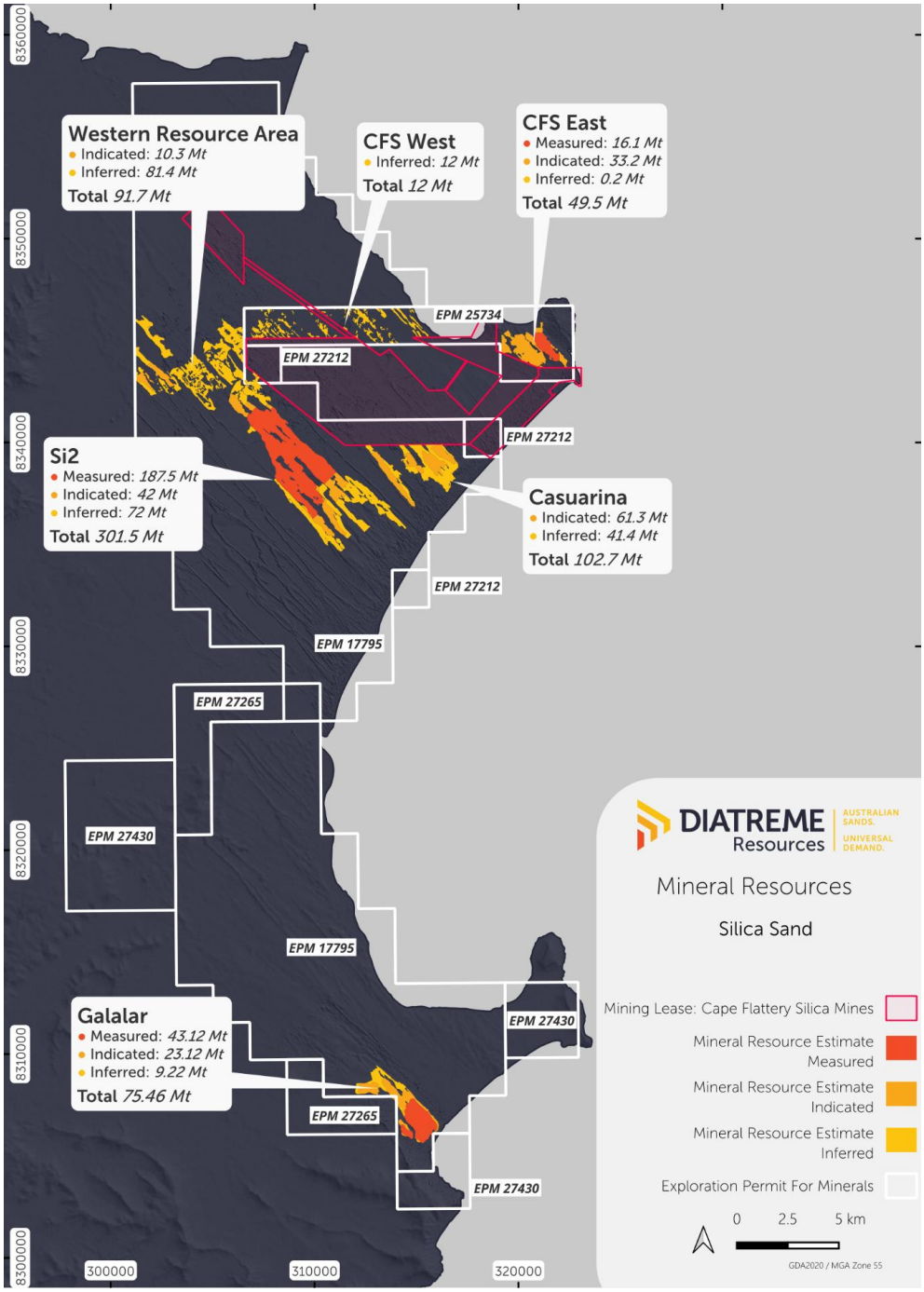

Figure 1: Diatreme's silica sand mineral resources, Far North Queensland

ASX LISTING RULE 5.8.1 SUMMARY

This executive summary outlines the Mineral Resource Estimate for the Casuarina Resource Area. It has been prepared in accordance with ASX Listing Rule 5.8.1 and takes effect from the date of issue.

GEOLOGY AND GEOLOGICAL INTERPRETATION

The Casuarina Resource Area sits within the Cape Bedford–Cape Flattery Dune Field, an extensive aeolian dune system spanning approximately 700 km² along the east coast of Cape York Peninsula. The dune field formed from quartz-rich sandstones of the Gilbert River Formation and Dalrymple Sandstone, with additional input from coastal granites and Hodgkinson Formation metasediments. Weathering and leaching within the Laura Basin aquifer system and through later surface erosion which mobilised, reworked and concentrated the silica sand now hosted in dune forms.

The Casuarina Dune system is split into East and West areas. The Western Area comprises a stabilised trailing arm of a large Pleistocene elongate parabolic dune, with numerous active Holocene parabolic dunes reworking the sand on it's Eastern flank. The base of mineralisation on the Western Dune is primarily characterised by a weak illuviated horizon, and groundwater encounters.

The Eastern Area comprises active Holocene multi-lobed elongate parabolic to parabolic dunes proximal to the coastline, with the maturity and stability of the dune system improving as the dune system is further inland.

Silica sand mineralisation is hosted primarily within the trailing arms and apices of elongate parabolic aeolian dunes, at various ages. Interdunal areas typically lack thick aeolian sand and instead expose B1 horizons, clays, bedrock, or other sediments, with the sediments commonly reworked by successive deflationary events.

Deflation maintains a parabolic geometry and proceeds downward until it reaches a zone, usually groundwater or saturated clays where moisture limits further wind transport of sand grains. A podsol eluviated horizon is observable and is topographically elevated nearer the coast. Dune flanks are steeper closer to the coast and become more subdued inland. Figure 1 illustrates these features in an active elongate parabolic dune.

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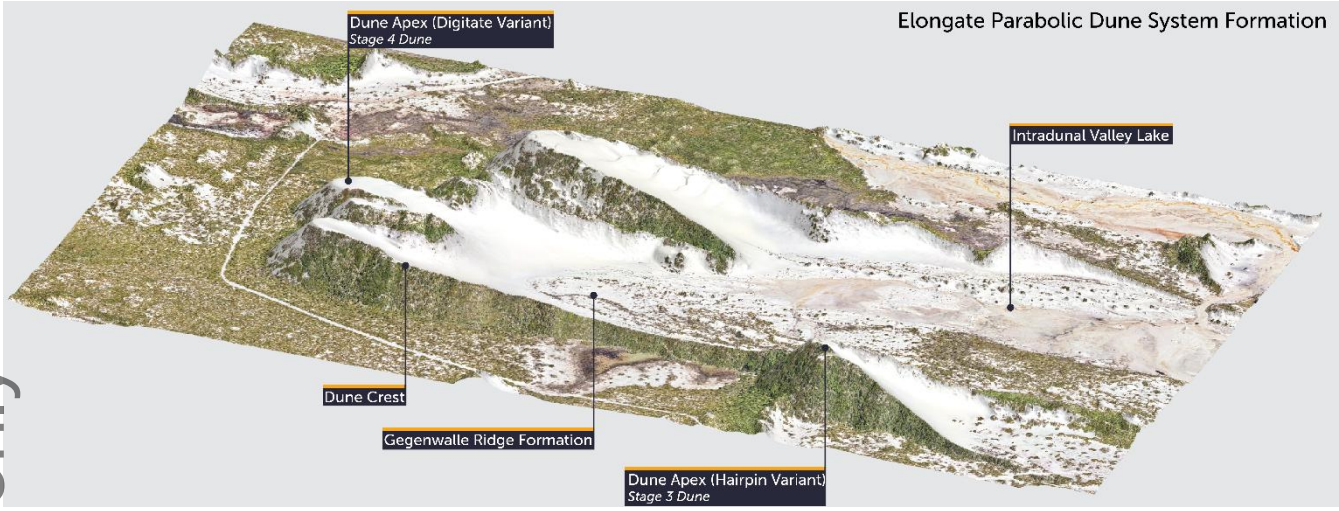

Figure 2: Evolution of active elongate parabolic dune system

SAMPLING PROGRAM	ID SERIES	# HOLES	DRILLING METHOD	COMMENTARY
JULY 2025 TO SEPTEMBER 2025	CAS25xxx	55	Aircore	1m interval samples were collected from an aircore drill rig, before being composited to a lithologically controlled sample (1-6m variable). All samples were assayed with a full XRF suite, inclusive of LOI. Primary Analysis Lab: ALS QA: Introduction of systematic recovery sampling. Introduction of NCS DC 60116a & NCS DC 60117a CRM Introduction of Coarse Blanks Introduction of ELIM22 CRM Duplicates 1 in 25
DECEMBER 2021	CAS0xxx	5	Hand Auger	1m interval samples were collected before being split in a 50/50 riffle splitter. The samples were collected in numbered calico sample bags and sealed ready for assaying. Primary Analysis Lab: BV
MARCH 2019	19xxxx	6		1m interval samples were collected before being split in a 50/50 riffle splitter. The samples were collected in numbered calico sample bags and sealed ready for assaying. Primary Analysis Lab: ALS

Table 2: Sampling Program Details

LOGGING & SAMPLING

Every drill hole was photographed, logged, and sampled under the Competent Person's supervision. Samples are retained as bagged splits within clearly labelled chip trays at the Diatreme Resources facility in Cooktown. The Competent Person is satisfied that the drilling, sampling, and analytical work meets the standard required for public reporting of a Mineral Resource under the JORC Code (2012)

DRILLING

The Mineral Resource Estimate is defined by 66 drill holes, all drilled vertically. Sampling was carried out using aircore drilling and hand augering.

Drilling programs were mainly concentrated on the trailing arms and apices of the elongate parabolic dunes. Additionally, hand augering was specifically carried out during early phase exploration, targeting accessible dunes, where silica sand mineralisation was visible from surface. Table 2 highlights the drilling techniques and holes used in the Mineral Resource Estimate.

Aircore drilling was carried out on a Diatreme Resources track-mounted rig with a 3" blade bit and 3 m rods. Hand augering was performed by Diatreme personnel using a Dormer Sand Auger of 2" internal diameter, with five one-metre extension rods. Drilling was terminated at refusal on damp clay basement or wet sand. All programs were designed and supervised by Diatreme Resources geologists.

SAMPLE ANALYSIS METHOD

Project samples have been analysed at either Bureau Veritas (Adelaide) or ALS (Brisbane) over the life of the project. The two laboratories' XRF methods (ALS ME-XRF26 and Bureau Veritas XF100) are regarded as comparable.

ESTIMATION METHODOLOGY

The Mineral Resource Estimate was prepared by modelling the silica sand unit (locally termed the "A2"). Topography was captured by LIDAR survey at a resolution of 10 points/m², from which a 1 m gridded digital elevation model with 10 cm relative vertical accuracy was produced. The top surface of the resource volume was set 0.3 m below the LIDAR topography, corresponding to the base of the topsoil. The base of the resource was constructed using:

- The base depth of the A2 unit determined from drilling, or augering
- The depth of the groundwater table determined from drilling, and
- Interpretation of the dune edge from LiDAR survey and aerial imagery.

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The resource boundary was defined through geological interpretation, supported by analysis of dune extents visible in LIDAR and aerial imagery. The top and base of the mineralised profile were interpreted using both assayed drill samples and geological observations from hand auger holes.

Coordinates of drill hole data and the block model were transformed so each dune base aligned to a single flattened RL, accounting for significant RL variations and dune thickness variability across the deposit. This allowed grade estimation to reflect podsolisation influences and reduce vertical smearing. Grades were interpolated within three semi-soft vertical domains (upper, middle, and lower sands) to capture observed vertical grade variations. After estimation, coordinates were transformed back to their original positions. A comparison with estimates run using untransformed coordinates showed comparable global tonnes and grades, confirming no material bias from the transformation.

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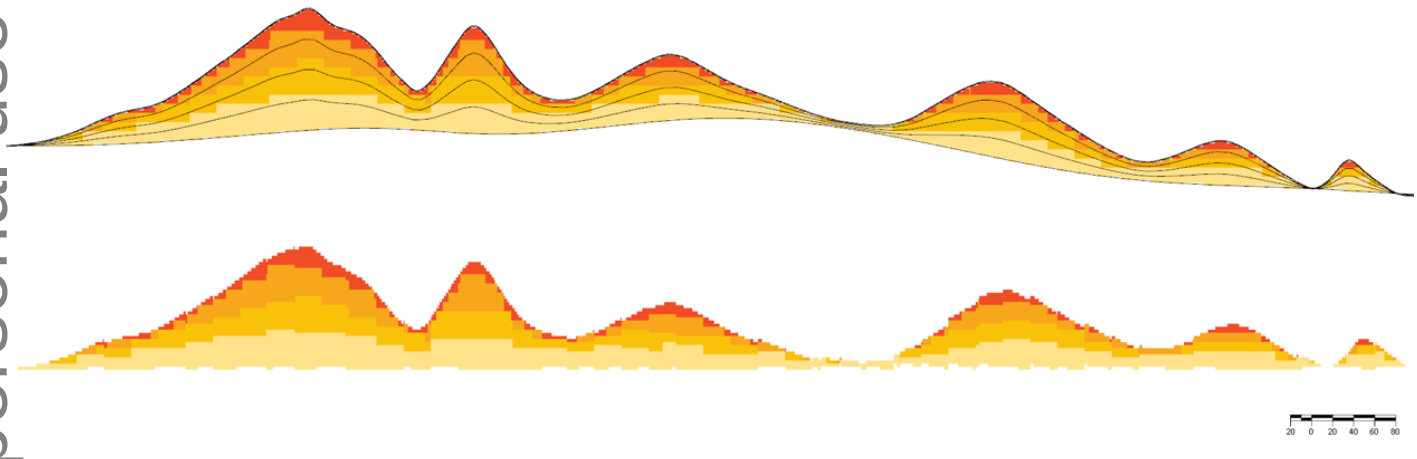

Figure 3: Schematic of Blocks Modelled in Flattened Space at Casuarina

Hand auger holes were not used in grade estimation owing to potential sample contamination inherent to the method. As these holes sit predominantly at the deposit margins, their mineralised intervals were instead interpreted geologically and used to guide and constrain the resource boundary. The intervals corresponded closely to the interdunal level, providing additional support for the geological interpretation.

Deposit grades were estimated into a block model oriented to the dunes' average strike of 315°. Parent blocks were sized at 25 m across strike by 25 m along strike by 3 m vertical, with 1 × 1 × 1 m cubic sub-blocks used to honour the undulating geological model.

Drill hole data were composited to a nominal 3 m interval prior to estimation. Grades were estimated using IDW2 in a flattened space, with validation checks run via IDW2 in regular space and ordinary kriging in both flattened and

regular space. The flattened space IDW2 estimate populated the block model for SiO_2, Fe_2O_3, TiO_2, Al_2O_3, and accessory geochemistry. Estimation was carried out in four sequential passes, with the search radii of each pass calibrated to inform classification into Indicated, and Inferred categories. Search axes for each block were oriented with the major axis horizontal along the dune strike (315°), the semi-major axis horizontal and perpendicular across the dune, and the minor axis vertical; pass-specific search distances were derived from a geological understanding of the dune system to honour the spatial structure of the data. A quadrant-based search was applied throughout, capped at 16 samples and requiring a minimum of two drill holes for a valid estimate. Block discretisation was set at 4 × 4 × 4 (X, Y, Z).

Bulk density was determined through laboratory testwork on dried and compacted samples collected from drilling across the Cape Flattery Dune Fields. A total of 132 samples were tested. The dry bulk density was calculated as the average of the samples, and a value of 1.65 tonnes per cubic metre was adopted for tonnage estimation.

Crosschecks were run against alternative block sizes, alternative estimation methods (Inverse Distance Weighting versus Ordinary Kriging), and alternative treatments of domain boundaries and coordinate space (flattened versus real/regular). No material differences were observed across these comparisons, supporting the robustness and reliability of the final Mineral Resource Estimate.

CUT OFF GRADES

No cut-off grade was applied at the compositing, block estimation, or reporting stages. The Mineral Resource is reported from every classified block carrying an interpolated SiO_2 grade. Although no cut-off was applied, a minimum SiO_2 grade of approximately 98.5% was one of several criteria used when defining the base of the geological model in drill holes, with geological domains delineated on a combination of SiO_2 grade, sand colour, and contaminant levels. Minor internal intervals returning below 98.5% SiO_2 were retained within the high-purity silica domain where they did not materially affect overall resource quality and, as confirmed by metallurgical testwork, were not expected to impact minerals processing.

RESOURCE CLASSIFICATION

Classification of the Mineral Resource follows the principles of the JORC Code (2012 edition), with blocks assigned to Indicated, or Inferred categories reflecting respective confidence in geological and grade continuity. The classification draws on a combination of factors, including depth of geological knowledge of the deposit, geological and mineralisation continuity, drill hole spacing, and quality control outcomes.

Additional inputs to the classification include drill hole logging, sample analytical results, geostatistical analysis, confidence in geological and grade continuity, and recent metallurgical and process test outcomes. Search and interpolation parameters, recently completed density data, and the requirements of JORC Code Clause 49 are also reflected in the classification process. Table 3 below breaks down the categories by the respective dune feature.

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RESOURCE CATEGORY	SILICA SAND MT	SIO_2 %	FE_2O_3 %	TIO_2 %	AL_2O_3 %
CASUARINA EAST					
INDICATED	38.5	99.03	0.14	0.20	0.13
INFERRED	29.7	99.06	0.11	0.15	0.12
TOTAL	**68.2**	**99.04**	**0.13**	**0.17**	**0.12**
CASUARINA WEST					
INDICATED	22.84	99.22	0.08	0.06	0.08
INFERRED	11.65	99.22	0.08	0.05	0.08
TOTAL	**34.50**	**99.22**	**0.08**	**0.06**	**0.08**

Table 3: June 2026 Casuarina Resource Area | Breakdown by MRE Category

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MINING AND METALLURGICAL METHODS AND PARAMETERS, AND OTHER MATERIAL FACTORS CONSIDERED TO DATE

Metallurgical testwork completed to date demonstrates that the silica sand resource responds readily to conventional washing and screening, producing a low-iron, high-purity silica sand suitable for photovoltaic glass applications.

The potential for economic extraction at Casuarina has been assessed against open-pit mining methods, anticipated product specifications, product marketability, and favourable logistics. On the basis of these factors, the Casuarina Resource Area is judged to have Reasonable Prospects for Eventual Economic Extraction (RPEEE) and is reported as an industrial mineral under JORC Code Clause 49.

Mineral Resource Estimate results for Casuarina are set out in Table 1 and globally in Table 4, with the Resource Area shown in Figure 5 on the following page. Representative cross-section and long-section profiles through the Resource Area are presented in Figure 6 below. All Mineral Resources lie within EPM's held by the company.

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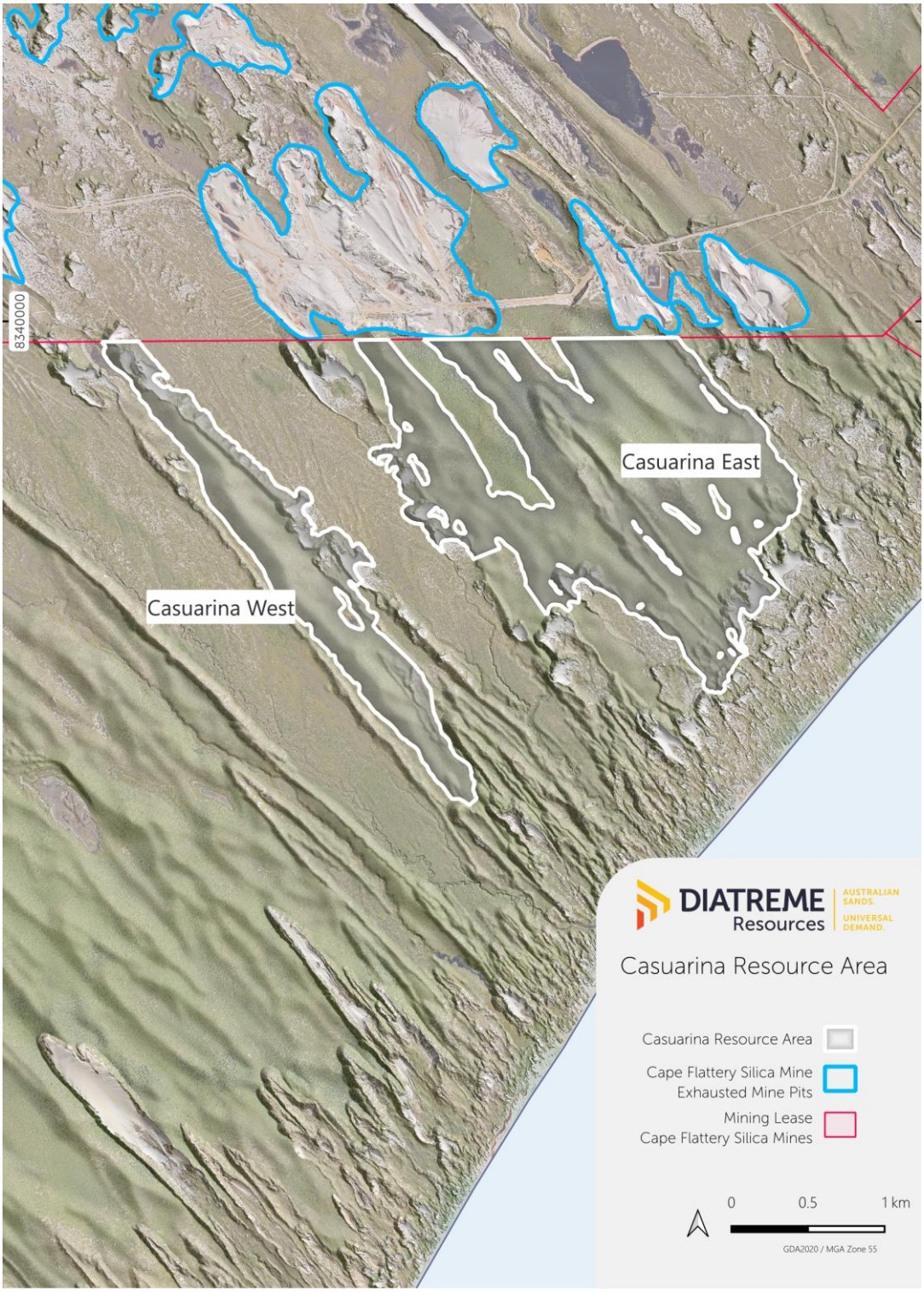

Figure 4: Casuarina Resource Area (East and West)

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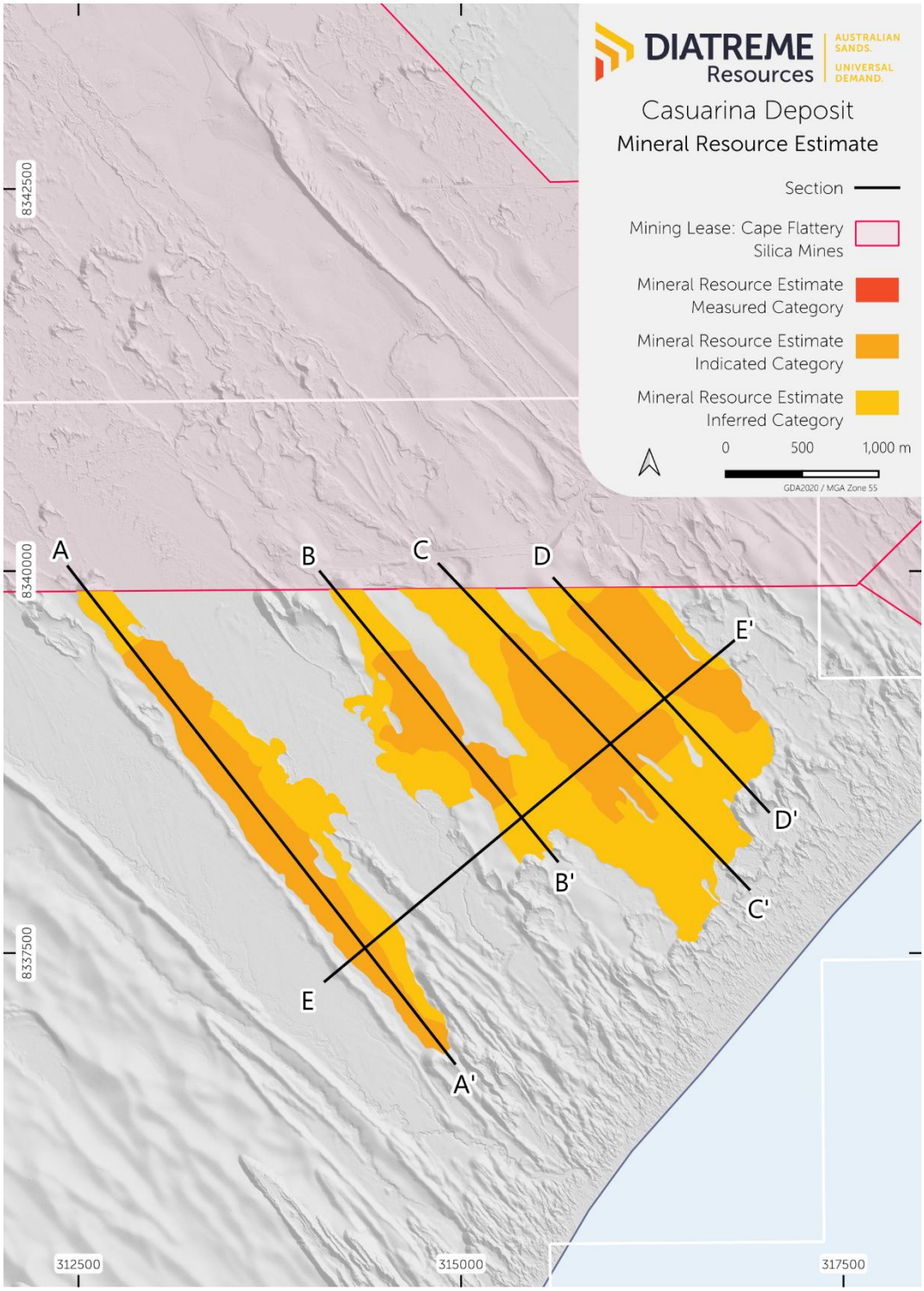

Figure 5: Mineral Resource Categories

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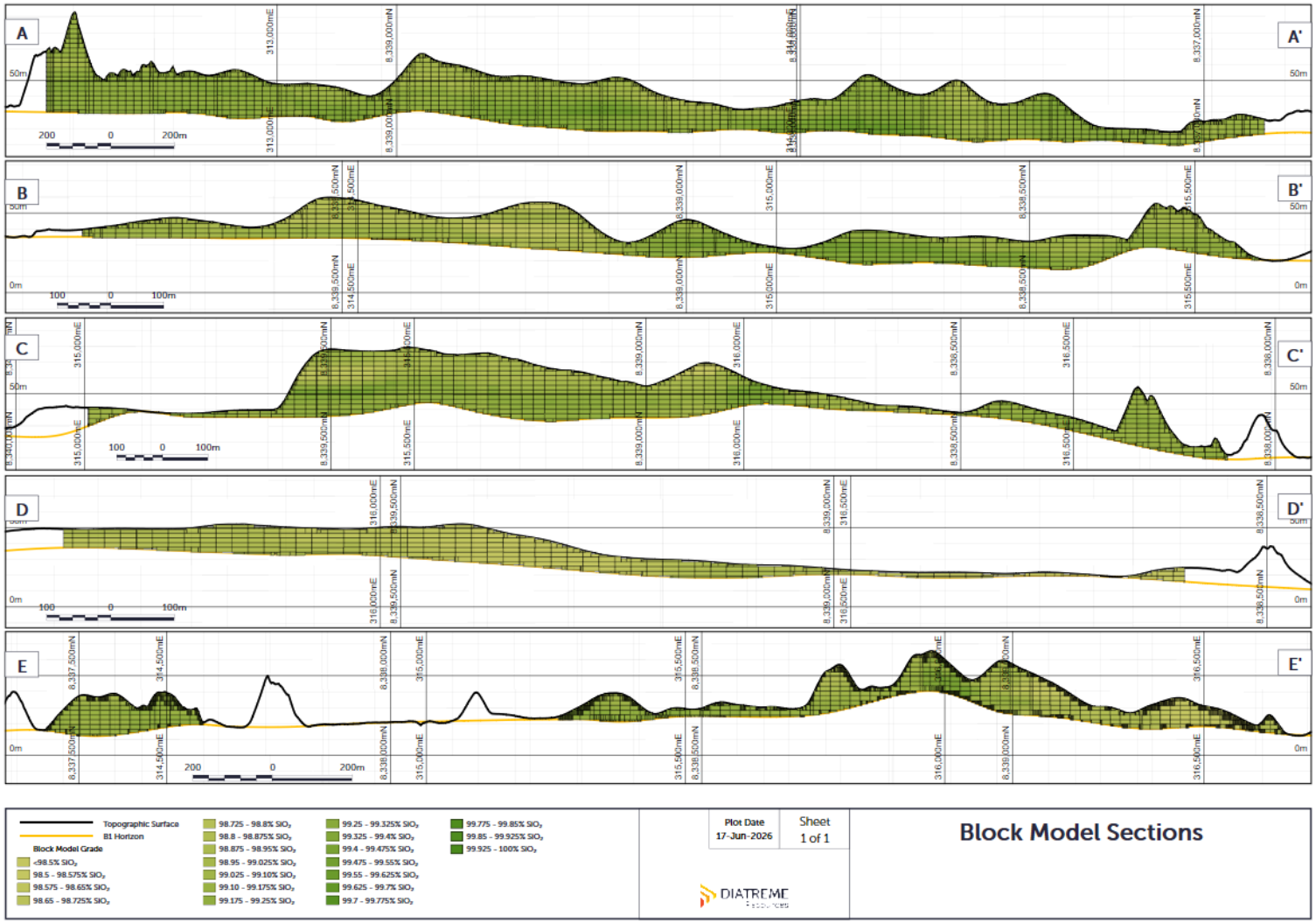

Figure 6: Sections indicating SiO_2 grade across Casuarina.

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Project	Mineral Resource Category	Tonnes (Mt)	SiO_2 %	Fe_2O_3 %	TiO_2 %	Al_2O_3 %
Galalar	Measured	43.12	99.21	0.09	0.11	0.13
	Indicated	23.12	99.16	0.09	0.13	0.10
	Inferred	9.22	99.10	0.11	0.16	0.11
	Total	75.46	99.18	0.09	0.12	0.12
Si2	Measured	187.5	99.25	0.10	0.14	0.11
	Indicated	42	99.16	0.12	0.16	0.11
	Inferred	72	99.17	0.13	0.17	0.11
	Total	301.5	99.20	0.11	0.15	0.11
WRA	Indicated	10.3	99.20	0.15	0.24	0.16
	Inferred	81.4	99.38	0.09	0.15	0.06
	Total	91.7	99.36	0.10	0.16	0.07
CFS West	Inferred	12	99.15	0.09	0.16	0.12
	Total	12	99.15	0.09	0.16	0.12
CFS East	Measured	16.1	99.20	0.08	0.12	0.22
	Indicated	33.2	99.05	0.10	0.18	0.25
	Inferred	0.2	99.00	0.12	0.27	0.28
	Total	49.5	99.10	0.09	0.16	0.24
Casuarina	Indicated	61.3	99.03	0.12	0.15	0.11
	Inferred	41.4	99.06	0.10	0.12	0.10
	Total	102.7	99.04	0.11	0.14	0.11
Total Silica Sand	Measured	246.72	99.24	0.10	0.13	0.12
	Indicated	170.0	99.09	0.11	0.16	0.14
	Inferred	216.2	99.22	0.11	0.15	0.09
	Total	**632.8**	**99.19**	**0.11**	**0.15**	**0.12**

Table 4: Diatreme Resources Mineral Resource Inventory across all Silica Sand Projects.

This announcement is authorised for release by the Board.

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About Diatreme Resources Limited

Diatreme Resources (ASX: DRX) is an emerging Australian producer of mineral and silica sands based in Brisbane. Our key projects comprise the Northern Silica Project (NSP) and Galalar Silica Sand Project in Far North Queensland, located adjacent to the world's biggest silica sand mine at Cape Flattery, together with the Cape Flattery Silica Project. The NSP has been designated a "Coordinated Project" by the Queensland Government, and is strategically located near the dedicated silica sand export focused Cape Flattery Port facility.

The NSP has been designated a Major Project (see DRX ASX release on 17 June 2025) by the Australian federal government**.** This reflects the significance of the low iron, high purity silica sand project in the context of critical minerals, both for Queensland and Australia.

In Western Australia's Eucla Basin, Diatreme's Cyclone Zircon Project with major approvals in place is considered one of a handful of major zircon-rich discoveries of the past decade.

Global material solutions group Sibelco is Diatreme's development partner on its silica projects portfolio. Sibelco has invested circa $56 million into both the silica sands projects and Diatreme at the corporate level, and is an important partner in all aspects of the projects' development.

Diatreme's significant silica sand resources will support global decarbonisation by providing the necessary high-grade, premium quality silica for use in the solar PV industry. The Company has a strong focus on ESG, working closely with its local communities and other key stakeholders to ensure the long-term sustainability of our operations, including health, safety and environmental stewardship.

Diatreme has an experienced Board and management, with expertise across all stages of project exploration, mine development and construction and project financing, together with strong community and government engagement skills.

For more information, please visit www.diatreme.com.au

ASX releases referenced for this release:

- 19 May 2026 – Significant Mineral Resource Estimate at Si2
- 13 April 2026 – Sale of CFS to DRX/Sibelco Silica J/V

- 26 March 2026 – Favourable Si2, Casuarina drilling boosts silica pipeline
- 09 September 2025 – Bulk metallurgical testwork confirms NSP product quality
- 23 June 2025 - Mineral Resource Estimate upgrade paves way for Northern Silica Project PFS
- 17 June 2025 – Northern Silica Project awarded Major Project Status
- 6 December 2023 – New maiden 91.7Mt silica resource at Western Resource Area
- 17 July 2023 – Cape Flattery Silica DFS Confirms Excellent Economics – *announced by MLM*
- 3 March 2023 – Maiden Inferred Mineral Resource of 12Mt at 99.15% SiO2, 0.09% Fe2O3 Estimated for Cape Flattery Silica West Project – *announced by MLM*
- 20 September 2021 – Galalar Silica Resource Expands by 22% to 75.5Mt

NOTE:
Diatreme confirms that it is not aware of any new information or data that materially affects the information included in the original releases and that all material assumptions and technical parameters underpinning the estimates in the original releases continue to apply and have not materially changed. Diatreme confirms that the form and context in which the competent person's findings are presented have not been materially modified from the original releases.

COMPETENT PERSONS STATEMENT

The information in this report that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Frazer Watson, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Watson is a full-time employee of Diatreme Resources. Mr Watson 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Watson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The corresponding JORC 2012 Table 1 is attached to this report and can be found in Appendix 1.

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APPENDIX 1: JORC TABLE 1

SECTION 1: SAMPLING TECHNIQUES AND DATA

CRITERIA	EXPLANATION	COMMENTARY
SAMPLING TECHNIQUES	• 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.	• For hand auger holes reported CAS0001 to CAS0005, hollow stem auger samples were collected in 1m intervals (~2kg) after passing through a single-tiered (50/50) riffle splitter. The sample was sent to Bureau Veritas in South Australia from which 150g was pulverised to produce a fused bead before being assayed by method code XF100. • For hand auger holes reported with the prefix 190, hollow stem auger samples were collected in a single 1m interval. This material was then submitted to ALS Brisbane from which 250g was pulverised to produce a fused bead before being assayed by method ME-XRF26. • For drill holes reported CAS25001 to CAS25055, Aircore drilling samples were collected in 1m intervals before being composited by scoop into nominal 2-6m composites controlled by lithological variables (~1kg). This material was then submitted to ALS Brisbane from which 250g was pulverised to produce a fused bead before being assayed by method ME-XRF26. • Mr Watson considers the quality of the sampling method to be fit for the deposit style, and the stage of exploration, given the homogenous nature of this silica sand deposit.
DRILLING TECHNIQUES	• 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.).	• Two (2) types of drilling have been utilised for exploration, Aircore (AC), and Hand Auger (HA). • AC drilling was by a track mounted drill rig with a 3" blade bit, and a rod length of 3m. • Hand Auguring (HA) was conducted using a Dormer Sand Auger with an internal diameter of 2". • Aircore drilling was to refusal, which occurs at geologically determined contact such as clayey sands at the base of mineralisation, or a water table. This is due to the limitations of AC drilling at the water table, and limitations of the AC drill rig when penetrating the clay layers. • Mr Watson considers the quality of the sampling method to be fit for the deposit style, as mineral sands are easily contaminated, or recoveries can be poor and not representative using other drilling methods.
DRILL SAMPLE RECOVERY	• 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	• Sample recovery is monitored at the rig by recording sample mass of each 1m interval to observe for the presence or deviation from a consistent sample size. Weighing of samples at the drill site was not undertaken in a systematic manner in prior years. In the absence of systematic weighing, sample recovery was visually monitored on the rig for a consistent sample size. • Sample recovery is maximised within a closed system from the drill bit to the riffle splitter. • After encountering wet clays, sacrificial rods are drilled into clean dry sand, to flush out any contamination through the drilling system, prior to drilling the subsequent drill hole.

CRITERIA	EXPLANATION	COMMENTARY
	have occurred due to preferential loss/gain of fine/coarse material.	• No relationship between recovery and grade has been observed, as the orebody is relatively homogenous. • Correct interval delineation on AC drilling is achieved with metre intervals marked on the drill mast, and samples are collected when the base of the top drive reaches a metre interval.
LOGGING	• 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.	• All drill holes have been logged in their entirety, with qualitative descriptions of grain size, sphericity, roundness, moisture content, lithology, and colour recorded. • Photography is captured on a chip tray basis firstly at the drill rig, and then later on a chip tray compartment by compartment basis when samples have dried. • Sample photography in a controlled setting using Imago software with a Canon EOS R5 and a Canon 24-50mm lens , a hexadecimal colour value is extracted from the imagery, and the RGB values are derived through python scripts. Colour photography is verified against a Calibrite ColorChecker. • The quality of logging is sufficient for this stage of exploration.
SUB-SAMPLING TECHNIQUES AND SAMPLE PREPARATION	• 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.	• AC samples were scooped from the sample bags representing 1m intervals, and composited to a nominal 2-6m composite. The single scoop is approximately 330g in mass. • Samples are split nominally to 150g – 250g at the respective laboratories, prior to pulverisation, which is then split again prior to fusion. • The PUL-33 method has a QC check on a 20g split to ensure >85% passes -75µm • Coarse flushes of an unpulverized sample matching ELIM22 CRM has been introduced to both clean the lab pulveriser between drill holes, and test for any contamination. ELIM22 was prepared by OREAS, specifically for silica sand material in the Cape Bedford / Cape Flattery dune systems. • Field duplicate results are validated upon receipt of lab results, particular attention is paid to Fe_2O_3, and TiO_2. • A coarse flush of the raw ELIM22 sample is included after intersecting a deleterious horizon – and this is used to clean the Tungsten Carbide ring mill / pulveriser at ALS Brisbane. All samples are pulverised sequentially through the same pulveriser. • Crushing is not required as the grain size of the sample material is suitable for pulverizing. • Mr Watson considers the drill sample sizes as appropriate for the grain size of the material, the style of mineralisation and the nature of the drilling program. • These methods are determined to be appropriate by the Competent Person to avoid sample carry-over contamination, in addition Cr_2O_3 is monitored to ensure that pulverisation is performed in a non-ferrous pulverising bowl.
QUALITY OF ASSAY DATA AND LABORATORY TESTS	• 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.	• As ME-XRF26, and XF100 methods are considered a total digest, it is considered appropriate for silica sand when assessing full sample geochemistry. • Loss On Ignition (LOI) determined by thermogravimetric analysis (TGA) using method code OA-GRA05x or ME-GRA05 at ALS or TG002 at Bureau Veritas) and, where a sample is placed in a furnace at ambient temperature and then heated to 1000°C, and then weighed. • Field duplicates were submitted at a nominal rate of 1 in 25 in line with the quality assurance procedure. Prior to 2023, this was nominally 1 in 50. • CRM (ELIM22) is utilised every 33rd sample. It has been noted that the variability in this sample has broadened in recent years, and that the number of samples submitted to the laboratory during drilling programs far exceeds the sample rates submitted during initial certification. • Either CRM NCS 60116a or NCS 60117a are used 2 in 100 – for samples drilled after 2024 • The quality control procedures adopted by Diatreme establish an acceptable level of accuracy and precision. Bureau Veritas, and ALS conduct their own internal checks, and these results have been provided to Diatreme and are monitored by both parties as part of the quality control process.

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CRITERIA	EXPLANATION	COMMENTARY
		• The variability observed between the primary sample and the field duplicate assay results are considered appropriate for the style of mineralisation by the Competent Person.
VERIFICATION OF SAMPLING AND ASSAYING	• 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	• Mr Watson and various Diatreme Resources' Exploration Geologists have personally inspected all sample intervals. • No twinned holes have been completed within the Casuarina Area, however, within the broader EPM, twinned holes in silica sand deposit tend to show no material change in lithological observations, and a minimal sampling bias observed, the only difference being the depth of refusal changed which is considered to be related to seasonal changes groundwater levels, if the twins are temporally spaced. • Collar and geological logging is captured by and stored within the geological logging/database software accordance with the company procedures. • Photographic data is captured, and stored within Imago, a software package that acts as a repository and analysis tool for geoscientific imagery. • Collar, geological and assay data is stored in a cloud hosted relational database. • No adjustment has been made to assay data.
LOCATION OF DATA POINTS	• 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.	• All drill hole locations have been surveyed using Spectra Precision SP60, with a Trimble RTX CenterPoint DGPS correction ± 0.05m on the horizontal plane. • The collar data is recorded in the UTM coordinate system: Map Grid of Australia 1994 (MGA94) Zone 55, this is then reprojected to GDA2020 Zone 55 for compatibility with other spatial files. • All drill holes are shallow and vertical, no down-hole surveying is conducted. • Digital elevation models derived from LiDAR (December 2022) were used as the topographic surface to generate RL's for each collar. The DEM was generated via a cloth simulation function, using an approximate 10 ground classified points per square metre. Relative accuracy is considered to be ± 0.1m.
DATA SPACING AND DISTRIBUTION	• 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.	• First pass drilling spaced nominally at 300m along dune crests of elongate parabolic and parabolic dunes, and in the interdunal valleys, although the Competent Person considers data spacing at these intervals are not a material constraint on the development of geological grade or geological continuity, and as such, the Competent Person considers the data spacing to be more than appropriate for this style of deposit, at this stage of exploration. • Select samples have been composited to nominal 3m intervals, following recommendations from a variability assessment completed by Measured Group in 2024, and also on an assessment that the 3m compositing also aligns with likely SMU's for the deposit.
ORIENTATION OF DATA IN RELATION TO GEOLOGICAL STRUCTURE	• 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.	• The deposit style is an unlithified aeolian sand deposit, comprised of a series of complex parabolic and elongate parabolic dune systems which are repeatedly deflated and are superimposed upon older dune systems. • The mineralisation process (podsolisation) is gravitationally controlled. The Competent Person has determined that vertical drilling intersects the bedforms at an angle which represents the true width of mineralisation. • The orientation of heavy mineral bedding (if present) is considered immaterial due to the processing methods of silica sand. The main grade control on economic extraction is the podsolisation profile. • No sampling bias is introduced by the orientation of drilling.
SAMPLE SECURITY	• The measures taken to ensure sample security.	• Sample bags were sealed by cable-tie, and transported in polywoven bags, then securely stored in a locked yard on-site until transported by courier to the respective labs. • Transport chain of custody forms have been reviewed for each sample dispatch. • Submission reconciliation reports are provided by the laboratory and checked against the sample submission forms.
AUDITS OR REVIEWS	• The results of any audits or reviews of sampling techniques and data.	• A review of the sampling techniques was conducted by the Competent Person in 2025, indicating compliance to internal standards.

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SECTION 2: REPORTING OF EXPLORATION RESULTS

CRITERIA	EXPLANATION	COMMENTARY
MINERAL TENEMENT AND LAND TENURE STATUS	• 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.	• These Exploration Results comprise exploration on the Casuarina Resource Area, which is located adjacent to the coastline in Far North Queensland, approximately 53km north of Cooktown. The project is adjacent to the east of the Cape Flattery Silica Mines (CFSM) Mining Lease. CFSM has been in operation since 1967 and is Queensland's largest producer of high purity silica and is reported to have the highest production of high purity silica sand of any mine historically. • The project is located at the northern end of the Cape Flattery/Cape Bedford dune field complex within the Exploration Permits for Minerals (EPM) 17795 • Most of the EPM, and the entirety of the Casuarina Resource Area is located on one land title, Lot 35/SP232620, a freehold lot of 110,000 hectares. • The Project and EPM is in the Mareeba Mining District and falls within the Hope Vale Aboriginal Shire Council area. This lies approximately 35km north of the township of Hope Vale, with a population of approximately 1,500 in the Hope Vale Aboriginal Shire Council. • EPM 17795, EPM 27265, EPM 25734, EPM 27212, and EPM 27430 comprise an "exploration project PROJ310". • PROJ310 is an extensive EPM package comprising approximately 625km2 covering the majority of the Cape Flattery-Cape Bedford Quaternary dune field complex. • PROJ310 is owned by Cape Silica Holdings Pty Ltd and its subsidiaries, which is a Joint Venture between Diatreme Resources 73.2% and Sibelco Silica Pty Ltd 26.8%. • Diatreme was granted a renewal on EPM 17795 "Cape Bedford" until 21 June 2026 based on continued targeting of heavy mineral sands and silica sand. The EPM was granted under protected Native Title Protection Conditions. As of May 2026, the tenure is in good standing. A renewal has been submitted. • EPM 27212 is due for renewal in Q4 2026.
EXPLORATION DONE BY OTHER PARTIES	• Acknowledgment and appraisal of exploration by other parties.	• Exploration for silica sand has been undertaken in the Cape Flattery – Cape Bedford area in 11 Authorities to Prospect (ATP's) or Exploration Permits for Minerals (EPMs) since the 1960's. In general, past exploration of the dune field has primarily focused on the prominent active parabolic dunes of clean white silica sand. • Historical exploration activities missed the southern extent of the Casuarina Resource Area in its entirety, until discovery by Diatreme Resources. • As there are no assay certificates for this historic data, and the locations of which are dubious, the data is considered qualitative and is not used for Mineral Resource Estimation, or Exploration Targeting.
GEOLOGY	• Deposit type, geological setting and style of mineralisation.	• The Casuarina Resource Area is comprised of unlithified aeolian dune complexes. • The Cape Flattery & Cape Bedford dune fields are aeolian dunes established in the Pleistocene epoch and regularly remobilised during the Pleistocene and Holocene epochs. The dune fields are situated on a coastal plain overlying the Hodgkinson Formation basement with Dalrymple Sandstone forming mesa on basement highs. • Mineralisation is thought to be due to repeated eluviation and illuviation events on immobilised dune systems comprised of an existing quartzose sand source, with reactivated dune systems also exhibiting mineralisation. Intradunal valleys tend to be a surface expression of the B1 horizon, and typically are not considered mineralised. • Deleterious metals are thought to have been eluviated by organic acids, which are transported by gravity through the stratigraphic column and illuviated either by binding to clay rich horizons, or transported away from the deposit through the water table.

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CRITERIA	EXPLANATION	COMMENTARY
DRILL HOLE INFORMATION	• 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: • 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	• All material collar information for drill holes has been aggregated in the Table of Material drill holes and Results attached in this appendix to this report.
DATA AGGREGATION METHODS	• 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	• Data aggregation used in this report is a calculation of the mean average for each reported variable across the respective mineralised profile for that drill hole. • All intercepts have been aggregated in the Table of Material drill holes and Results attached in this appendix to this report.
RELATIONSHIP BETWEEN MINERALISATION WIDTHS AND INTERCEPT LENGTH	• 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').	• All drilling was vertical (-90°) intersecting undulating flat-lying aeolian dune sands. • Downhole length correlates with true width of mineralisation. • The deposit is a large homogenous mass of eluviated aeolian sands. Intercept length is an order of magnitude smaller than the mineralisation width. The eluviated zone is gradual, with in most cases a distinct delineable contact for the illuviated zone.
DIAGRAMS	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being	• Plan view of drill hole collar locations and appropriate sectional views are contained in this report.

CRITERIA	EXPLANATION	COMMENTARY
	reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	
BALANCED REPORTING	• 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.	• All mineralised silica sand results used in the estimation of this Mineral Resource are reported. • Where the results in the table are not published, there is either organics present in the first metre, or unmineralized sands / sandy clays below the mineralised horizon. The acknowledgement of these intervals/zones are considered material in the context that they exist and are used to constrain the resource geometry, but the results are considered immaterial in the context of populating the grade model.
OTHER SUBSTANTIVE EXPLORATION DATA	• 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.	• Fe_2O_3 percentage is the most significant limiting factor on conversion of naturally occurring silica sand (in this region) to high purity silica sand product and determines value after SiO_2 percentage. • Fe_2O_3 when found in association with TiO_2, does not act as a contaminant or barrier to refining high- purity silica sand, with metallurgical testing showing gravity separation to accurately remove this impurity. • Colour (oranges, yellows, reds) tend to be a significant - but not limiting – indicator on the identification of deleterious or low yielding sands.

FURTHER WORK	• 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.
		• Mr Watson recommends the following programs to increase geological confidence on the deposit.
		  • The B1 horizon needs to be checked and tested in the interdune locations by drilling, or geological observations with hand augering to assist better defining geological continuity and support potential upgrade areas, if increases in geological continuity are desired.
		  • Complete mineralogical analysis on Fe bearing minerals (such as surface coats, and inclusions) within the silica sands, and with respect to the relevant size fractions.
		  • Establishment of a geometallurgical model to underpin the relationship between head grade and amenability to processing.
		  • Submission of samples for umpire checks
		  • Maintain the routine use of Certified Reference Materials (CRMs) to monitor and validate assay accuracy for primary and deleterious elements.
		  • Geochemical analysis of the +710µm and -106µm fractions
		  • Maintain regular collection of bulk density measurements to support accurate tonnage estimation.
		  • Verify and refine the interpretation of topsoil thickness across the resource area, considering the observed variability in vegetation density.

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SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES

CRITERIA	EXPLANATION	COMMENTARY

DATABASE INTEGRITY	• 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.
		• The Mineral Resource Estimate for the Casuarina Resource Area is based on information provided by CSHPL. Mr Watson considers it appropriate and reasonable for the purpose of estimating Mineral Resources in accordance with the guidelines of the JORC Code (2012).
		• The data used for resource estimation, includes but was not limited to:
		  • drill hole collar information, including total hole depths;
		  • drill hole lithological logging data;
		  • Sample data, including sample intervals and assay results
		  • Metallurgical testwork results;
		  • Density measurements;
		  • Quality Assurance/Quality Control (QAQC) data.
		• Data validation procedures included checks on collar locations, assay results against laboratory certificates, lithological coding consistency, and QAQC performance. No material data errors were identified.

SITE VISITS	• 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.	• The Competent Person (Mr Watson) has undertaken a site visit. During the visit, active drilling and sampling procedures were observed, and field observations were made of the dune field characteristics. The site visit confirmed that drilling practices, sampling methods, and geological interpretations were consistent with the data provided.
GEOLOGICAL INTERPRETATION	• 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.	• The Casuarina Resource Area is located within the Cape Bedford–Cape Flattery Dune Field. Silica sand mineralisation is predominantly hosted within the trailing arms and apices of elongate parabolic aeolian dunes. • The Mineral Resource is generally constrained to these dune features, which are clearly defined by surface LiDAR imagery. Drilling often intersects overlapped dunal features, which are not represented by LiDAR or aerial photography. • Interdunal areas are often devoid of thick aeolian sand and predominantly exhibit exposed B1 horizons, clays, bedrock, or other sediments. Where drilling has intersected obscured silica sand mineralisation, the sampled sand has been included in the geological model. • There is an observable basement high coincident with the topographic high towards the coastline on the western dunes. • The interpreted geology of the Casuarina Resource Area is considered robust, and alternative interpretations are unlikely to materially impact the Mineral Resource Estimate.
DIMENSIONS	• 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.	• The Mineral Resource Estimate spans a total area of 488 hectares with varying dimensions: Casuarina West (3.8 km x 580m), Casuarina East (2.8km x 2km). The average thickness of the resource is ~10-11 metres, though it can reach up to 59 metres. The top of the resource at the dune crest varies in elevation from 9 mRL to 89 mRL, corresponding to the topography, while the bottom ranges from 7 mRL to 45 mRL, aligning with the water table or resource basement level. • The depth of the resource below the surface is 0.3m, the deposit is effectively mineralised from surface.

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CRITERIA	EXPLANATION	COMMENTARY

ESTIMATION AND MODELLING TECHNIQUES	• 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 Mineral Resource Estimate was prepared by modelling the high-purity silica sand unit (A2). The geological model incorporated several key parameters. The topography surface was surveyed using LIDAR techniques to a resolution of 1 m horizontally and 10 cm relative vertical accuracy. The top surface of the resource volume was set at 0.3 m below the LIDAR topography, representing the base of the topsoil. The base of the resource was constructed from:
		  • The base depth of the A2 unit determined from drilling
		  • The depth of the groundwater table determined from drilling
		  • Interpretation of the dune edge from LiDAR survey and aerial imagery
		• The resource boundary was established by geological interpretation and analysis of surface dune extents visible in LIDAR and aerial imagery. Both assayed drill samples and geological observations from hand auger holes were used to interpret the top and base of the mineralised profile
		• Coordinates of drill hole data and the block model were transformed so each dune base aligned to a single flattened RL, accounting for significant RL variations and dune thickness variability across the deposit. This allowed grade estimation to reflect podsolisation influences and reduce vertical smearing. Grades were interpolated within four semi-soft vertical domains (upper, middle, and lower and bottom sands) to capture observed vertical grade variations. After estimation, coordinates were transformed back to their original positions. A comparison with estimates run using untransformed coordinates showed comparable global tonnes and grades, confirming no material bias from the transformation.
		• Hand auger holes were excluded from grade estimation due to concerns about sample contamination associated with the drilling method. These holes were predominantly located at the edges of the deposit, and their mineralised intervals were geologically interpreted to guide and constrain the resource boundaries. These intervals closely matched the interdunal level, further validating the geological interpretation.
		• A block model was used to estimate the deposit grade. The orientation of the block model was set to the average strike of the dunes (315 degrees). The dimensions for the parent blocks were determined as 25 m across strike by 25 m along strike by 3 m vertical, which were then subdivided into sub-blocks of 1 x 1 x 1 m to best fit the undulating geological model.
		• All drill hole data were composited to nominal 3 m intervals prior to grade estimation.
		• Grade estimation was completed using IDW at a power of 2 and a validation check estimate was completed using Ordinary Kriging.
		• IDW^2 was used to populate the block model for SiO_2, Fe_2O_3, TiO_2, Al_2O_3, and LOI. Aligning with the balance of Diatreme's Silica Sand estimates.
		• The grade estimation process was conducted over 4 (four) sequential passes, each defined by specific search radii that help to guide to the categories of 'Indicated' and 'Inferred' in resource classification.
		• This methodology involved setting the major sample search parameters for each block horizontally in the average strike direction of the dune (315 degrees), the semi-major search direction is also set horizontal (perpendicular to the major search direction) across the dune, and the minor search direction is set to vertical.
		• Search distances were informed by variographic analysis to align the interpolation with the spatial characteristics of the data, even though IDW does not strictly require it. All passes used a quadrant-based search with the maximum number of samples set at 16 and required a minimum of two drill holes for reliable grade estimation. Block discretisation of 4 x 4 x 4 (X,Y, Z) was employed.

MOISTURE	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Tonnages are estimated on a dry basis. Bulk density testwork was completed on dried and compacted samples, supporting a dry bulk density of 1.65 tonnes per cubic metre, which is typical for silica sand deposits.
CUT-OFF PARAMETERS	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• No cut-off grade was applied during compositing, block estimation, or reporting. The Mineral Resource is reported from all classified blocks with interpolated SiO_2 grades.

CRITERIA	EXPLANATION	COMMENTARY
		• While no cut-off was applied, a minimum SiO_2 grade of approximately 98.5% was one of several factors considered when defining the base of the geological model in drill holes. Geological domains were based on a combination of SiO_2 grade, sand colour, and contaminant levels. • Minor internal intervals with SiO_2 grades below 98.5% were included within the high-purity silica domain where they did not materially affect the overall quality of the Mineral Resource.
MINING FACTORS OR ASSUMPTIONS	• 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.	• Mining operations considered will involve extracting material directly from the face using a Wheel Loader. Once extracted, the material will be transported to the processing plant either through a conveyor system or via a slurry pipeline. The entire face will be mined. • Some intervals of less than 98.5% SiO_2 are included within the high purity silica unit however, these do not materially dilute the resource. • The upper 300mm is considered topsoil and reserved for rehabilitation purposes. This overburden surface forms the upper boundary of the estimated geological domain and is not included in the Mineral Resource Estimate.
METALLURGICAL FACTORS OR ASSUMPTIONS	• 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.	• Metallurgical testwork completed to-date confirms the silica sand resource is readily amenable to upgrading by screening, density separation, attritioning, and magnetic separation to produce a low iron, high purity silica sand for photovoltaic applications (solar panels). • Metallurgical testwork completed to date across the Cape Flattery Dune Field has been benchtop in nature. However the benchtop methods are agreeable with bulk testwork undertaken at the Cape Flattery Silica deposit, and the Galalar Silica Sand project. • These initial metallurgical test results clearly demonstrate that low iron, high purity silica sands are potentially deliverable. As final products may require tight specifications, further systematic metallurgical testing should be considered from future infill and grade control drilling.
ENVIRONMENTAL FACTORS OR ASSUMPTIONS	• 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 greenfield project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be	• Based on the nature of the deposit and proposed mining method, environmental factors are not expected to present significant barriers to eventual economic extraction. • Various processing flowsheets developed for Diatreme Resources have identified that high Fe, oversize, low grade, heavy minerals or slimes are rejected from product streams. The material will be stacked to form a replacement dune as a post mining surface, suitable for rehabilitation. The coagulants and flocculants used in processing are considered to be environmentally neutral. Early-stage considerations indicate that the proposed mining and processing activities are likely to have manageable environmental impacts, subject to future detailed assessments. • The Casuarina Resource Area lies above a perched aquifer, and a deeper dune aquifer which are hydrogeologically connected to window lakes within the dune fields. At present there is no relationship established between mining and the water levels of these lakes. • The Casuarina Resource Area is proximal to several wetlands, vegetation types in the dune area are considered habitat for the Ctenotus rawlinsonii skink, and there are possibly several protected plant species in the area such as Xanthostemon arenius, Acacia solenota, Dendrobium johannis, Myrmecodia beccarii. The impact of the presence of these species in the area, on potential extractive operations is unknown, and is currently in assessment.

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	reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	
BULK DENSITY	• 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.	• Bulk density was determined through laboratory testwork on dried and compacted samples collected from drilling across the broader Cape Flattery & Cape Bedford Dune Fields. A total of 132 samples were tested. The dry bulk density was calculated as the average of the measured samples, and a value of 1.65 tonnes per cubic metre was adopted for tonnage estimation. Void spaces and porosity are not considered material given the aeolian dune nature of the deposit.
CLASSIFICATION	• 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.	• The Mineral Resource has been classified according to the principles of the JORC Code (2012 edition). The resource has been divided into Indicated, and Inferred categories, corresponding to a high, moderate and low level of confidence in the geological and grade continuity of the resource. The classification integrates several key factors, including: depth of geological knowledge of the deposit, geological and mineralisation continuity, drill hole spacing, and the results of quality control measures. • The classification also considers drill hole logging, analytical results from drill samples, geostatistical analysis, and confidence in geological and grade continuity, along with recent metallurgical/process test outcomes. Additionally, search and interpolation parameters, recently completed density data, and considerations from JORC Code Clause 49 are factored into the classification process. • All relevant factors have been considered and the result reflects Mr Watson's view of the deposit.
AUDITS OR REVIEWS.	• The results of any audits or reviews of Mineral Resource estimates.	• Internal reviews of the Mineral Resource Estimate were conducted and confirmed that the results were robust and aligned with industry standards.
DISCUSSION OF RELATIVE ACCURACY/ CONFIDENCE	• 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	• The Mineral Resource classification reflects the Competent Person's assessment of the confidence in the distribution of mineralisation and grade variability across the Casuarina Resource Area on a global basis. • A high degree of confidence is placed in the geological interpretation, supported by the known formation processes of the aeolian dune sands. High SiO_2 grades and strong geological continuity have been observed across the majority of drill holes. A detailed LiDAR survey provides high confidence in the topographic surface, with the base of the resource interpreted from drilling observations (geological & geochemical picks). • The interpreted geology of the Casuarina Resource Area is considered robust, and alternative interpretations are unlikely to materially impact the Mineral Resource Estimate. • No production data is available for comparison. Estimation was based on interpolation of composited drill hole data within geological domains guided by dune morphology and lithological logging.

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CRITERIA	EXPLANATION	COMMENTARY
	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.	

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APPENDIX 2: TABLE OF MATERIAL DRILL HOLES

Hole ID	Collar Information						Mineralised Interval			Head Grade					
	Easting GDA 2020 Zone 55	Northing GDA 2020 Zone 55	RL m	Azi	Dip	Notes	Depth m	From m	To m	SiO_2 %	Fe_2O_3 %	TiO_2 %	Al_2O_3 %	LOI %	Total %
CAS25001	313065	8339315	27.8	0°	-90°		33	0.3	33	99.11	0.09	0.07	0.08	0.06	99.50
CAS25002	312970	8339425	39.4	0°	-90°		45	0.3	45	99.21	0.07	0.06	0.06	0.03	99.52
CAS25003	313144	8339193	41.1	0°	-90°		36	0.3	36	99.07	0.11	0.15	0.07	0.03	99.55
CAS25004	313292	8338941	15.5	0°	-90°		36	0.3	36	99.06	0.08	0.05	0.09	0.11	99.50
CAS25005	313439	8338689	14.9	0°	-90°		33	0.3	33	99.25	0.07	0.05	0.07	0.08	99.64
CAS25006	313615	8338481	15.2	0°	-90°		33	0.3	33	99.28	0.07	0.04	0.09	0.06	99.65
CAS25007	313732	8338221	13.6	0°	-90°		30	0.3	28	98.88	0.17	0.20	0.08	0.04	99.52
CAS25008	313944	8338009	12.8	0°	-90°		27	0.3	27	99.32	0.09	0.05	0.08	0.03	99.69
CAS25009	314147	8337799	12.1	0°	-90°		36	0.3	36	99.33	0.10	0.09	0.08	0.09	99.81
CAS25010	314319	8337547	11.6	0°	-90°		30	0.3	30	99.06	0.10	0.10	0.09	0.07	99.54
CAS25011	314506	8337322	11.4	0°	-90°		24	0.3	21	99.33	0.08	0.06	0.07	0.14	99.77
CAS25012	314617	8337160	11.0	0°	-90°		15	0.3	12	99.28	0.05	0.05	0.07	0.09	99.63
CAS25013	314704	8337036	12.1	0°	-90°		15	0.3	12	99.08	0.04	0.03	0.05	0.07	99.37
CAS25014	313788	8338602	10.1	0°	-90°		15	0.3	15	99.19	0.09	0.04	0.08	0.05	99.54
CAS25015	314537	8338945	71.9	0°	-90°		24	0.3	24	99.22	0.08	0.11	0.08	0.05	99.64
CAS25016	314609	8338840	69.3	0°	-90°		21	0.3	21	98.81	0.07	0.11	0.09	0.11	99.30
CAS25017	314717	8338930	104.8	0°	-90°		12	0.3	12	98.95	0.12	0.24	0.07	0.09	99.60
CAS25018	314684	8339203	92.9	0°	-90°		36	0.3	33	98.76	0.17	0.30	0.09	0.09	99.56
CAS25019	314581	8339368	38.5	0°	-90°		21	0.3	16	98.90	0.08	0.13	0.12	0.04	99.39
CAS25020	314868	8338967	61.4	0°	-90°		30	0.3	29	99.18	0.09	0.16	0.11	0.01	99.66
CAS25021	315100	8338743	66.8	0°	-90°		21	0.3	21	99.31	0.08	0.13	0.11	0.13	99.89
CAS25022	315243	8338562	27.6	0°	-90°		18	0.3	18	99.20	0.08	0.14	0.07	0.09	99.69
CAS25023	315336	8338403	27.0	0°	-90°		27	0.3	27	99.11	0.10	0.17	0.09	0.09	99.67
CAS25024	315301	8338817	57.1	0°	-90°	1	18								
CAS25025	315497	8338872	51.9	0°	-90°		9	0.3	8	99.24	0.08	0.12	0.11	0.02	99.67
CAS25026	315695	8338829	50.2	0°	-90°		27	0.3	26	99.21	0.09	0.13	0.10	0.05	99.68
CAS25027	315596	8339017	60.4	0°	-90°		41	0.3	41	98.96	0.17	0.30	0.09	0.06	99.73
CAS25028	315483	8339171	54.0	0°	-90°		39	0.3	39	99.28	0.10	0.15	0.07	0.10	99.81
CAS25029	315386	8339373	47.1	0°	-90°		45	0.3	45	99.07	0.12	0.18	0.08	0.11	99.67
CAS25030	315815	8338656	49.6	0°	-90°		33	0.3	30	98.93	0.11	0.13	0.09	0.07	99.43
CAS25031	315962	8338450	87.5	0°	-90°		21	0.3	20	98.88	0.13	0.16	0.09	0.11	99.47
CAS25032	316160	8338225	78.3	0°	-90°		18	0.3	17	99.17	0.10	0.14	0.07	0.08	99.66
CAS25033	316335	8338033	65.7	0°	-90°		12	0.3	8	99.19	0.08	0.10	0.06	0.08	99.58
CAS25034	316027	8338734	64.1	0°	-90°		15	0.3	11	98.89	0.15	0.16	0.14	0.11	99.55
CAS25035	316156	8338551	33.7	0°	-90°		18	0.3	13	98.89	0.15	0.19	0.11	0.06	99.50
CAS25036	316334	8338342	33.7	0°	-90°		9	0.3	7	99.27	0.08	0.10	0.09	0.07	99.70

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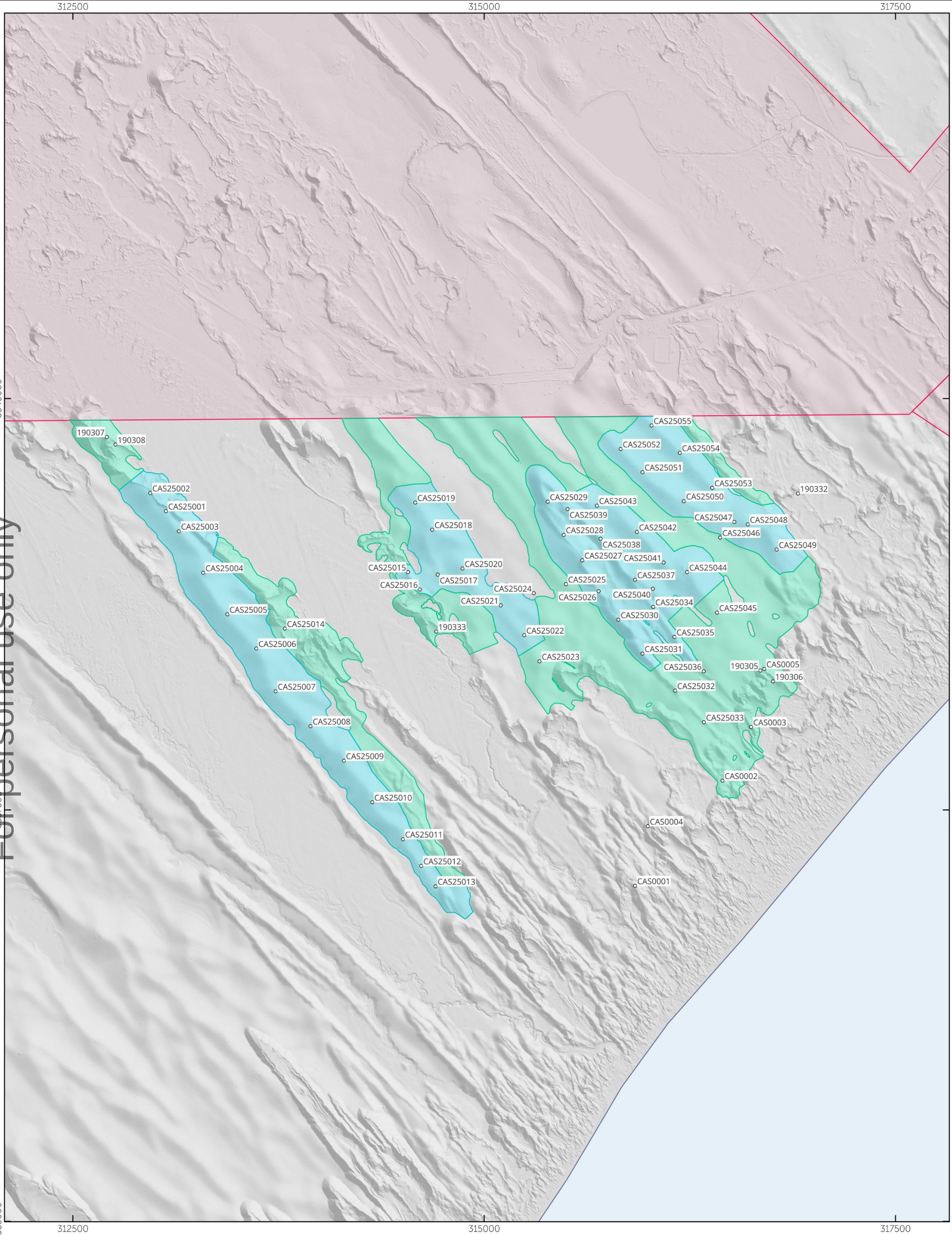
Hole ID	Collar Information						Mineralised Interval			Head Grade					
	Easting	Northing	RL	Azi	Dip	Notes	Depth	From	To	SiO_2	Fe_2O_3	TiO_2	Al_2O_3	LOI	Total
	GDA 2020 Zone 55	GDA 2020 Zone 55	m				m	m	m	%	%	%	%	%	%
CAS25037	315917	8338899	38.1	0°	-90°		36	0.3	33	98.85	0.15	0.24	0.09	0.05	99.51
CAS25038	315707	8339148	44.8	0°	-90°		33	0.3	33	99.09	0.08	0.12	0.11	0.14	99.64
CAS25039	315506	8339328	29.8	0°	-90°		36	0.3	36	99.05	0.11	0.18	0.08	0.11	99.67
CAS25040	316025	8338844	34.5	0°	-90°		21	0.3	15	99.43	0.08	0.10	0.10	0.08	99.92
CAS25041	316090	8339003	47.9	0°	-90°		36	0.3	36	99.00	0.16	0.22	0.14	0.10	99.77
CAS25042	315928	8339189	29.3	0°	-90°		24	0.3	23	98.95	0.16	0.21	0.12	0.07	99.66
CAS25043	315685	8339349	27.5	0°	-90°		23	0.3	21	98.89	0.14	0.18	0.10	0.05	99.51
CAS25044	316233	8338945	49.7	0°	-90°		36	0.3	34	98.39	0.22	0.23	0.22	0.12	99.36
CAS25045	316415	8338699	43.3	0°	-90°		9	0.3	8	98.79	0.10	0.15	0.11	0.11	99.39
CAS25046	316434	8339155	32.8	0°	-90°		9	0.3	8	98.92	0.11	0.17	0.08	0.07	99.49
CAS25047	316520	8339250	27.6	0°	-90°		21	0.3	20	98.35	0.33	0.43	0.18	0.16	99.66
CAS25048	316602	8339235	40.8	0°	-90°		39	0.3	34	98.53	0.23	0.31	0.17	0.08	99.49
CAS25049	316777	8339082	30.0	0°	-90°		33	0.3	33	98.06	0.33	0.35	0.35	0.12	99.39
CAS25050	316213	8339376	31.9	0°	-90°		24	0.3	23	98.52	0.19	0.25	0.15	0.13	99.40
CAS25051	315962	8339552	32.0	0°	-90°		18	0.3	15	98.71	0.15	0.16	0.22	0.19	99.58
CAS25052	315829	8339693	32.4	0°	-90°		21	0.3	18	98.83	0.12	0.11	0.18	0.14	99.49
CAS25053	316386	8339457	30.6	0°	-90°		12	0.3	11	98.70	0.17	0.30	0.12	0.08	99.53
CAS25054	316189	8339670	36.9	0°	-90°		30	0.3	30	98.88	0.14	0.23	0.11	0.04	99.54
CAS25055	316017	8339836	37.3	0°	-90°		30	0.3	30	98.68	0.17	0.29	0.11	0.07	99.46
190305	316678	8338347	50.9	0°	-90°	2	1	0.3	1	98.97	0.07	0.10	0.06	0.13	99.37
190306	316755	8338281	34.4	0°	-90°	2	1	0.3	1	99.69	0.02	0.03	0.03	0.08	99.87
190307	312706	8339766	75.7	0°	-90°	2	1	0.3	1	99.44	0.09	0.13	0.07	0.12	99.89
190308	312759	8339720	60.1	0°	-90°	2	1	0.3	1	99.34	0.04	0.06	0.04	0.08	99.58
190332	316907	8339423	14.0	0°	-90°	2	1	0.3	1	99.22	0.09	0.15	0.07	0.12	99.70
190333	314708	8338584	26.9	0°	-90°	2	1	0.3	1	99.56	0.03	0.04	0.04	0.13	99.82
CAS0001	315917	8337039	54.3	0°	-90°	2	4	0.3	4	99.51	0.03	0.06	0.09	0.13	99.91
CAS0002	316448	8337678	40.1	0°	-90°	2	4	0.3	4	99.13	0.06	0.13	0.08	0.22	99.71
CAS0003	316622	8338004	45.6	0°	-90°	2	5	0.3	5	99.14	0.03	0.06	0.07	0.35	99.75
CAS0004	315994	8337401	49.3	0°	-90°	2	5	0.3	5	99.10	0.12	0.21	0.15	0.10	99.79
CAS0005	316702	8338357	53.3	0°	-90°	2	5	0.3	5	98.48	0.32	0.52	0.14	0.16	99.73

Notes

1 Drill hole did not intersect significant mineralisation
2 Hand auger geology was used to identify mineralised intercept



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- Drilling
- Mineral Resource Estimate: Measured Category
- Mineral Resource Estimate: Indicated Category
- Mineral Resource Estimate: Inferred Category
- Mining Lease: Cape Flattery Silica Mines

Note: Refer to the Table of Material Drillholes for status of drillhole in Mineral Resource Estimate

0.5 0 0.5 1 1.5 km

Drill Locations

Mineral Resource Estimate (June 2026)

Document #: DRX_NSP_CP_260092	Scale: 1:20000
Version:	CRS: GDA2020 / MGA zone 55
Author: Frazer Watson	Date Created: 18/06/2026
Approved: Frazer Watson	Date Approved: 18/06/2026