ASX
ANNOUNCEMENT

20th June 2019

Boost for Galalar with sampling of regional exploration targets confirming continuity of high silica grades

- **Potential for Galalar Silica Project to further expand resource, with sampling test results confirming regional exploration targets Elim Road North and South contain high purity silica sand (> 99% purity silica)**
- **Diatreme targeting a resource target range at Elim Road North and South of 110 million tonnes (Mt) to 1.1 Billion tonnes (Bt) of high purity silica, suitable for premium quality silica market such as solar panels**
- **New program follows recent upgrade of Galalar's Indicated Mineral Resource estimate (Nob Point) and upcoming release of commercial scoping study, amid solid demand for premium-quality silica**
- **Galalar Silica Project located in world-class silica exploration province, adjacent to the world's largest operating silica mine at Cape Flattery.**

Emerging silica sands explorer and developer, Diatreme Resources Limited (ASX: DRX) announced today a further boost for its Galalar Silica Project, with test results from hand auger exploration program sampling confirming that potential resource extension targets Elim Road North and South contain extremely high purity silica sand suitable for the premium silica market.

The majority of the twenty (20) auger holes returned >99% SiO_2, (see Appendices that follow for auger results) showing the potential for a further resource upgrade following the recent maiden Indicated Resource estimate of 21.5 million tonnes (Mt) >99% SiO_2 and a total resource of 30.2Mt (refer ASX announcement 14 May 2019).

Sampling was completed using a sand auger to vertically drill test to depth of 4m, which was the limit of available extension rods (see images below). Sampling was conducted on 1m intervals and generally 3 samples were taken between 1 and 4m.

Diatreme is currently progressing a commercial scoping study for Galalar, following discussions with potential offtakers showing a ready market into Asia for its potential premium product.

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Located around 200km north of Cairns, Galalar lies within the same sand dune system and in close proximity to the world's largest operating silica mine at Cape Flattery (owned by Mitsubishi Corporation).

The Cape Flattery silica sand product is recognised as a global benchmark for quality silica sand and is widely used for industrial purposes throughout Asia and the world. The global silica sand market is seen reaching nearly US$10 billion in annual revenues by 2022, with a compound annual average growth rate of 7.2% (source: IMARC Group), while the global solar PV glass market is estimated to reach US$48.2 billion by 2025, up from US$3.3 billion in 2016 (source: Bizwit Research & Consulting).

Bulk testing results have demonstrated the project's ability to produce premium-grade silica using standard processing techniques, meeting the requirements for high-end glass and solar panel manufacturing and capable of attracting premium prices (refer ASX announcement 9 January 2019).

In March 2019, Diatreme announced an initial silica sands Exploration Target at Galalar, ranging from 210Mt to 2.1Bt of silica (refer ASX announcement 25 March 2019).

Table 1: Regional Exploration Targets - Galalar Silica Project

Prospects	Surface Area	Ave Dune Height (m)	Resource Target Range (Mt) From	To
Elim Road North	6,000m x 3,000m	40	**100**	**1,000**
Elim Road South	4,000m x 800m	20	**10**	**100**
Other Regional Targets	See Table 2 in Appendices for more information		100	1000
Combined			210	2,100

Note: The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration completed to date to estimate a Mineral Resource in accordance with the JORC 2012 Edition Guidelines. It is uncertain if further exploration will result in the estimation of a Mineral Resource.

***Cautionary Statement**: An Exploration Target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of*

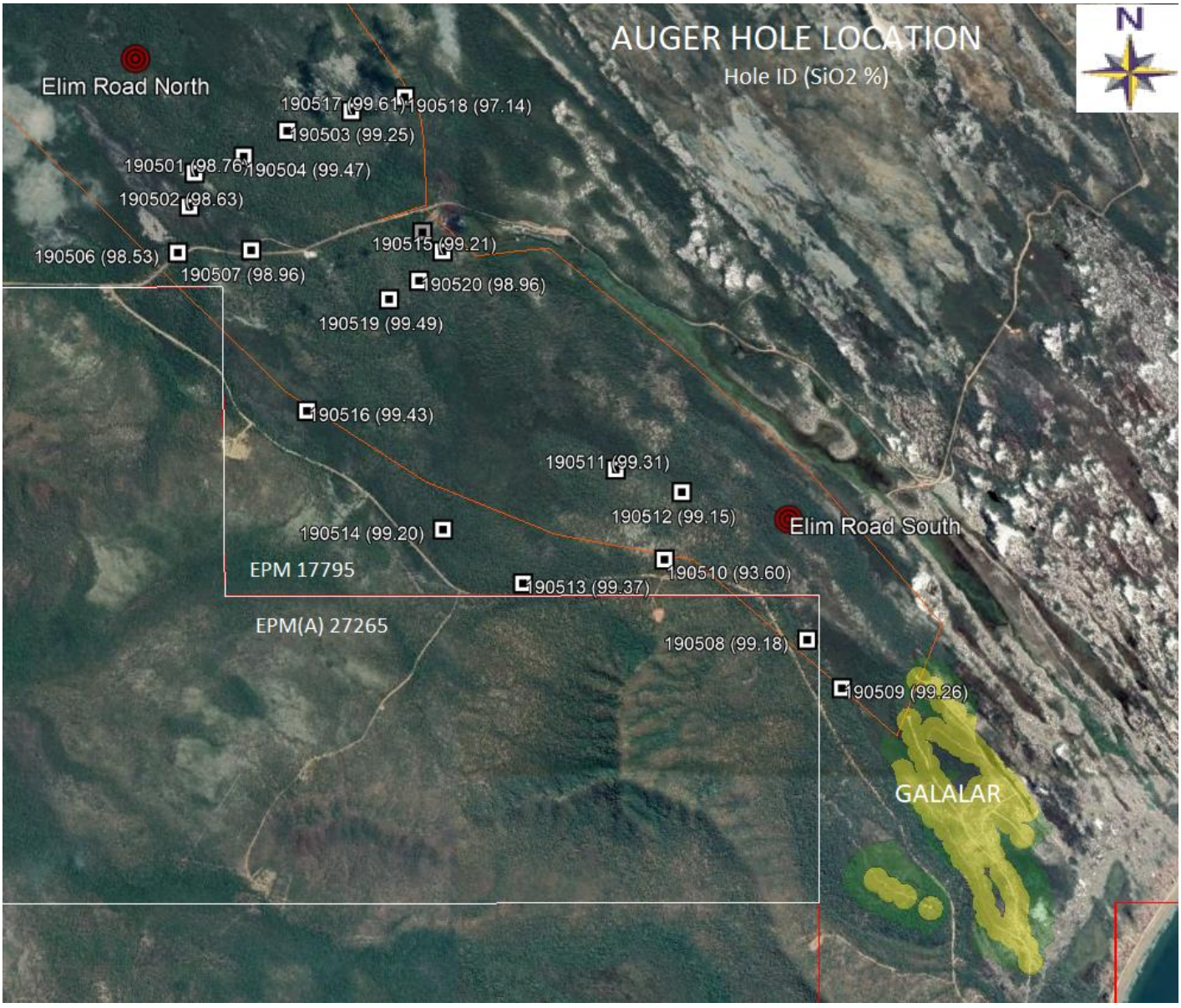
grade (or quality), relates to mineralisation for which there has been insufficient exploration to estimate a Mineral Resource.

Commenting on the latest update, Diatreme's CEO, Neil McIntyre said: "Galalar's potential to become a highly valuable source of premium quality silica continues to increase, with the prospects of a further resource expansion from the high-priority regional exploration targets in this world-class silica exploration province.

"With demand for premium silica continuing to increase amid the solar revolution, the upcoming scoping study is expected to highlight Galalar's investment attractiveness given its proximity to Asian markets.

"Diatreme is confident of unlocking value from this project for the benefit of all stakeholders, working in partnership with traditional owners, Hopevale Congress, to deliver new jobs and investment for North Queensland."

Figure 1: Auger Hole (SiO_2)



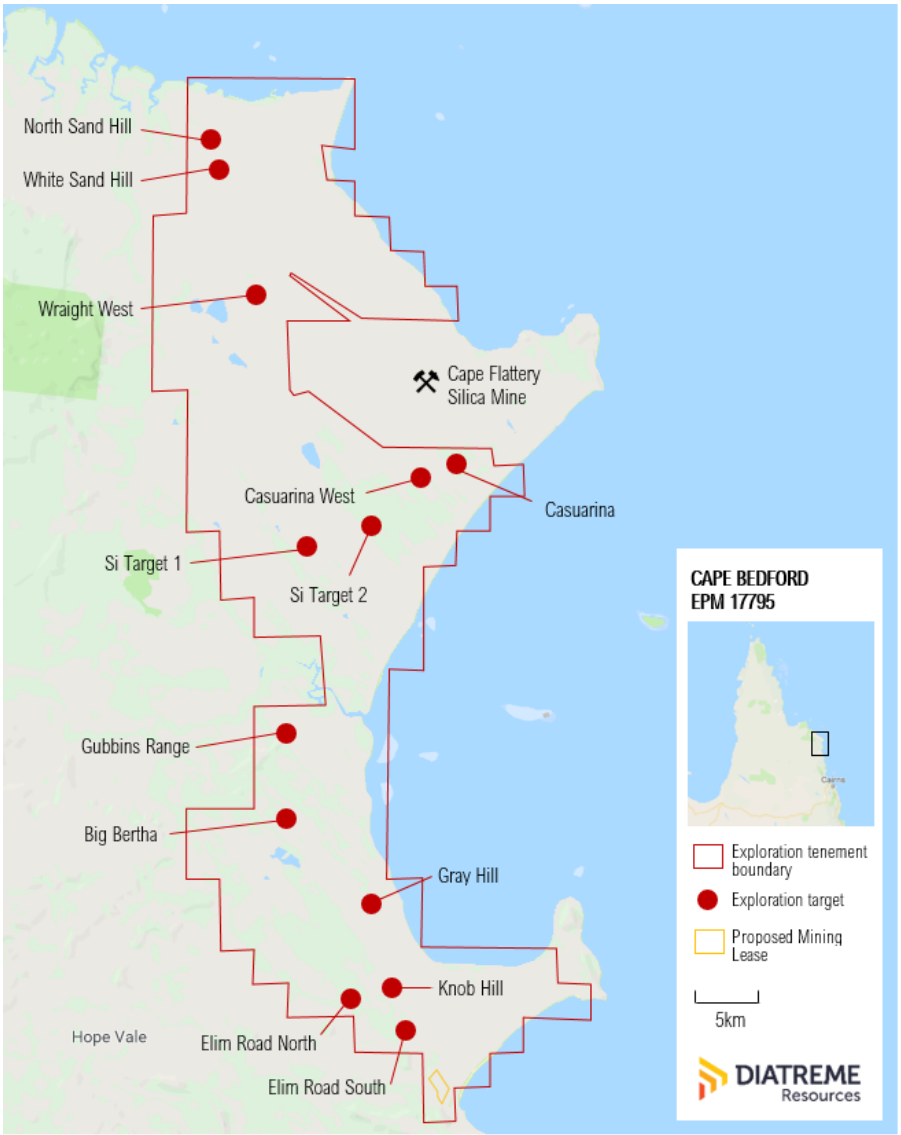


Figure 2. Galalar Exploration Tenement and Resource Area

Regional Setting

The Cape Bedford/Cape Flattery region of North Queensland is dominated by an extensive Quaternary sand mass and dune field that stretches inland from the present coast for approximately 10km and extends 50km from north to south.

The large transgressive elongate parabolic sand dunes were likely initiated by blowouts of beach ridges and have evolved under conditions of persistent south-easterly winds on an exposed coastal aspect, with sand supplies continually provided by an erosional shoreline during marine transgressions. Multiple episodes of dune building are evident.

Historical exploration is limited in the project area due to the relative remoteness and lack of vehicle tracks within the dune system. Coupled with locally steep terrain and dense vegetation cover in places, only cursory investigations of the dunes historically had been completed.

Methodology/Testing

In May 2019, Diatreme targeted the established stationary dune system(s), which were mapped and interpreted to have well developed podzolic profiles containing high purity silica sands. These include the north-west extension of the Nob Hill resource area at Galalar and could potentially contain significant volumes of silica sand as they are large and extensive.

Preliminary sampling auger testing around the edges indicated high purity silica sand. Contingent on results and environmental clearances, access tracks need to be installed to better assess the potential. These targets are bisected by Elim Beach Road and are the closest to possible port facilities at Cooktown.

Sampling was completed using a sand auger to vertically drill test to depth of 4m, which was the limit of available extension rods (see below). Sampling was conducted on 1m intervals and generally 3 samples were taken between 1 and 4m.

Regional exploration at Galalar Silica Project, May 2019

Next Steps

Diatreme will continue to prioritise its further exploration activity with a focus on areas of highest value to the Company.

These activities will include further targeted drilling to undertake a selective deeper sampling program and testing of bulk sample mineralogy, with a particular focus on identifying the silica deposits that are capable of meeting the standards required for the high value product.

Advanced desktop commercial assessments continue with a focus on identifying key infrastructure requirements for the establishment of export and product loading facilities and associated logistics. Diatreme anticipates release of its initial Galalar project commercial scoping study in the third quarter.

Ongoing advanced discussions with potential offtakers indicate a ready market into Asia for sub 100ppm Fe (low iron) 99% plus Si02 silica product. The Company anticipates significant progress regarding formalisation of offtake arrangements concurrently with the release of the scoping study.

Neil McIntyre
Chief Executive Officer

Greg Starr
Chairman

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APPENDICES

May Sampling Program – Elim Road North and South

Sample ID	Easting MGA	Northing MGA	RL	From	To	Prospect	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)	ZrO_2 (%)	LOI
190501_1	310250	8310419	69	0	1	Elim Rd North	98.39	0.07	0.26	0.15	0.03	0.27
190501_2	310250	8310419	69	1	2	Elim Rd North	98.96	0.05	0.08	0.14	0.03	0.11
190501_3	310250	8310419	69	2	3	Elim Rd North	98.94	0.04	0.08	0.04	<0.01	0.1
190501_4	310250	8310419	69	3	4	Elim Rd North						
190502_1	310217	8310221	67	0	1	Elim Rd North	98.6	0.05	0.08	0.17	0.04	0.17
190502_2	310217	8310221	67	1	2	Elim Rd North	98.64	0.07	0.17	0.27	0.05	0.16
190502_3	310217	8310221	67	2	3	Elim Rd North	98.65	0.07	0.05	0.12	0.06	0.09
190502_4	310217	8310221	67	3	4	Elim Rd North						
190503_1	310815	8310666	108	0	1	Elim Rd North	99.41	0.06	0.12	0.1	0.02	0.13
190503_2	310815	8310666	108	1	2	Elim Rd North	99.41	0.04	0.03	0.05	0.03	0.06
190503_3	310815	8310666	108	2	3	Elim Rd North	98.94	0.04	0.09	0.06	0.12	0.06
190503_4	310815	8310666	108	3	4	Elim Rd North						
190504_1	310552	8310514	101	0	1	Elim Rd North	99.26	0.05	0.05	0.09	0.01	0.09
190504_2	310552	8310514	101	1	2	Elim Rd North	99.39	0.05	0.1	0.08	0.01	0.06
190504_3	310552	8310514	101	2	3	Elim Rd North	99.77	0.05	0.05	0.09	0.01	0.12
190504_4	310552	8310514	101	3	4	Elim Rd North						
190505_1	311609	8310083	25	0	1	Elim Rd South	98.76	0.07	0.2	0.21	0.04	0.1
190505_2	311609	8310083	25	1	2	Elim Rd South	99.11	0.07	0.1	0.15	0.02	0.12
190505_3	311609	8310083	25	2	3	Elim Rd South	99.19	0.07	0.14	0.07	0.01	0.15
190505_4	311609	8310083	25	3	4	Elim Rd South						
190506_1	310147	8309945	47	0	1	Elim Rd North & South	98.39	0.18	0.19	0.16	0.02	0.3
190506_2	310147	8309945	47	1	2	Elim Rd North & South	98.3	0.32	0.27	0.16	0.02	0.48
190506_3	310147	8309945	47	2	3	Elim Rd North & South	98.89	0.11	0.11	0.18	0.02	0.17
190506_4	310147	8309945	47	3	4	Elim Rd North & South						
190507_1	310589	8309963	55	0	1	Elim Rd North & South	98.74	0.07	0.21	0.28	0.05	0.08
190507_2	310589	8309963	55	1	2	Elim Rd North & South	98.8	0.06	0.08	0.17	0.03	0.36
190507_3	310589	8309963	55	2	3	Elim Rd North & South	99.33	0.05	0.13	0.12	0.02	0.09
190507_4	310589	8309963	55	3	4	Elim Rd North & South						

Sample ID	Easting MGA	Northing MGA	RL	From	To	Prospect	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)	ZrO_2 (%)	LOI
190508_1	313945	8307661	25	0	1	Elim Rd South	99.16	0.05	0.05	0.1	0.01	0.11
190508_2	313945	8307661	25	1	2	Elim Rd South	99.12	0.06	0.11	0.13	0.02	0.08
190508_3	313945	8307661	25	2	3	Elim Rd South	99.25	0.06	0.05	0.13	0.02	0.1
190508_4	313945	8307661	25	3	4	Elim Rd South						
190509_1	314156	8307373	28	0	1	Elim Rd South	99.18	0.06	0.14	0.13	0.02	0.13
190509_2	314156	8307373	28	1	2	Elim Rd South	99.55	0.07	0.05	0.12	0.02	0.14
190509_3	314156	8307373	28	2	3	Elim Rd South	99.05	0.05	0.11	0.09	0.01	0.1
190509_4	314156	8307373	28	3	4	Elim Rd South						
190510_1	313085	8308135	62	0	1	Elim Rd South	93.6	3.19	1.01	0.3	0.02	1.27
190510_2	313085	8308135	62	1	2	Elim Rd South	88.67	5.95	1.67	0.28	0.02	2.2
190510_3	313085	8308135	62	2	3	Elim Rd South						
190511_1	312787	8308672	46	0	1	Elim Rd South	99.3	0.07	0.05	0.08	0.01	0.21
190511_2	312787	8308672	46	1	2	Elim Rd South	99.39	0.06	0.1	0.1	0.01	0.16
190511_3	312787	8308672	46	2	3	Elim Rd South	99.24	0.07	0.06	0.13	0.02	0.13
190511_4	312787	8308672	46	3	4	Elim Rd South						
190512_1	313185	8308539	42	0	1	Elim Rd South	99.35	0.07	0.15	0.16	0.03	0.13
190512_2	313185	8308539	42	1	2	Elim Rd South	99.11	0.07	0.09	0.19	0.03	0.17
190512_3	313185	8308539	42	2	3	Elim Rd South	98.98	0.07	0.14	0.13	0.02	0.24
190512_4	313185	8308539	42	3	4	Elim Rd South						
190513_1	312237	8307986	59	0	1	Elim Rd South	99.78	0.09	0.08	0.17	0.03	0.14
190513_2	312237	8307986	59	1	2	Elim Rd South	99.13	0.09	0.21	0.26	0.05	0.07
190513_3	312237	8307986	59	2	3	Elim Rd South	99.21	0.08	0.13	0.25	0.03	0.09
190513_4	312237	8307986	59	3	4	Elim Rd South						
190514_1	311752	8308304	63	0	1	Elim Rd South	99.4	0.07	0.16	0.11	0.01	0.09
190514_2	311752	8308304	63	1	2	Elim Rd South	99.19	0.07	0.08	0.15	0.02	0.09
190514_3	311752	8308304	63	2	3	Elim Rd South	99.01	0.08	0.14	0.18	0.02	0.1
190514_4	311752	8308304	63	3	4	Elim Rd South						
190515_1	311732	8309970	58	0	1	Elim Rd South	98.64	0.1	0.15	0.24	0.03	0.49
190515_2	311732	8309970	58	1	2	Elim Rd South	99.52	0.06	0.13	0.1	0.01	0.08
190515_3	311732	8309970	58	2	3	Elim Rd South	99.48	0.06	0.11	0.16	0.02	0.11
190515_4	311732	8309970	58	3	4	Elim Rd South						
190516_1	310927	8309007	55	0	1	Elim Rd South	99.61	0.04	0.09	0.03	<0.01	0.13
190516_2	310927	8309007	55	1	2	Elim Rd South	99.2	0.05	0.02	0.04	0.01	0.13
190516_3	310927	8309007	55	2	3	Elim Rd South	99.49	0.04	0.12	0.05	0.01	0.26
190516_4	310927	8309007	55	3	4	Elim Rd South						
190517_1	311192	8310791	74	0	1	Elim Rd North	99.67	0.06	0.05	0.09	0.01	0.15

Sample ID	Easting MGA	Northing MGA	RL	From	To	Prospect	SiO_2 (%)	Al_2O_3 (%)	Fe_2O_3 (%)	TiO_2 (%)	ZrO_2 (%)	LOI
190517_2	311192	8310791	74	1	2	Elim Rd North	99.6	0.07	0.16	0.13	0.02	0.08
190517_3	311192	8310791	74	2	3	Elim Rd North	99.55	0.06	0.06	0.12	0.02	0.07
190517_4	311192	8310791	74	3	4	Elim Rd North						
190518_1	311509	8310879	65	0	1	Elim Rd North	96.5	1.4	0.68	0.17	0.01	0.97
190518_2	311509	8310879	65	1	2	Elim Rd North	98.02	0.95	0.21	0.12	0.01	0.39
190518_3	311509	8310879	65	2	3	Elim Rd North	96.9	1.76	0.36	0.16	0.01	0.74
190518_4	311509	8310879	65	3	4	Elim Rd North						
190519_1	311422	8309674	69	0	1	Elim Rd South	99.67	0.06	0.04	0.05	<0.01	0.06
190519_2	311422	8309674	69	1	2	Elim Rd South	99.55	0.07	0.12	0.07	0.01	0.04
190519_3	311422	8309674	69	2	3	Elim Rd South	99.24	0.07	0.08	0.13	0.01	0.01
190519_4	311422	8309674	69	3	4	Elim Rd South						
190520_1	311598	8309789	71	0	1	Elim Rd South	98.96	0.13	0.28	0.11	0.01	0.13
190520_2	311598	8309789	71	1	1.5	Elim Rd South	96.02	0.97	1.81	0.15	0.01	0.89
190520_3	311598	8309789	71	1.5	2.7	Elim Rd South	98.39	0.07	0.26	0.15	0.03	0.27

Table 2: Silica Sand Targets

	Priority	Description	Surface Area	Ave Dune Height (m)	Resource Target Range (Mt) From	To
Elim Road North	High	North of Elim Road, very large forest covered dune system along western edge of the dune field.	6,000m x 3,000m	40	100	1,000
Elim Road South	High	South of Elim Road, northern continuation of Nob Point Dune System	4,000m x 800m	20	10	100
Other Regional Targets **Casuarina Hill**	High	Immediately south of CFSM working pit and closest to Port facilities.	1,200m x 800m	30	5	50
Casuarina West Dune	Med	Long Sand dune south of CFSM mine workings	2,000m x 250m	20	2	20
Big Bertha	Med	Longitudinal and exposed dune system about 10km NW of Elim Beach. Large exposed dune	1,200m x 600m	20	2.5	25

	Priority	Description	Surface Area	Ave Dune Height (m)	Resource Target Range (Mt) From	To
Silica 01	Med	Large Area of exposed sand dunes clustered together. Iron stained sand in colour.	6,000M x 1,000m	30	30	300
Silica 02	Med	Large Sand Dune system	8,000m x 1,250m	30	50	500
Gubbins Range	Med	Large Parabolic dune with associated elongate parabolic dunes. Intersects Gubbins Range basement Rocks south of McIvor River	6,000m x 200m	20	4	40
Wraight West		Dune system immediately west of ML 7069 Mt Wraight which is northern Satellite ML	1,000m x 800m	20	2.5	25
Gray Hill		Longitudinal dune running NW from Coloured Sands, with a large parabolic sand dune adjacent known as Grey Hill.	6,000m x 200m	20	4	40
					210	2,100

Competent Person Statement

Competent Person Statements - Silica

The information in this report that relates to Exploration Results from the Cape Bedford Project is based on information reviewed and compiled by Mr. Neil Mackenzie-Forbes, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr. Mackenzie-Forbes is a director of Sebrof Projects Pty Ltd (a consultant geologist to Diatreme Resources Limited). Mr. Mackenzie-Forbes has sufficient experience which 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. Mackenzie-Forbes 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.

The information in this report that relates to Silica Mineral Resources is based on information compiled by Brice Mutton from Ausrocks Pty Ltd who has significant experience in Industrial Minerals and Quarry Resource assessments. Brice Mutton has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity for which he is undertaking 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 (The JORC Code).

Brice Mutton consents to the inclusion in the report on the matters based on their information in the form and context in which it appears.

Forward looking statements: This document may contain forward looking statements. Forward looking statements are often, but not always, identified by the use of words such as "seek", "indicate", "target", "anticipate", "forecast", "believe", "plan", "estimate", "expect" and "intend" and statements that an event or result "may", "will", "should", "could" or "might" occur or be achieved and other similar expressions. Indications of, and interpretations on, future expected exploration results or technical outcomes, production, earnings, financial position and performance are also forward-looking statements. The forward-looking statements in this presentation are based on current interpretations, expectations, estimates, assumptions, forecasts and projections about Diatreme, Diatreme's projects and assets and the industry in which it operates as well as other factors that management believes to be relevant and reasonable in the circumstances at the date that such statements are made. The forward-looking statements are subject to technical, business, economic, competitive, political and social uncertainties and contingencies and may involve known and unknown risks and uncertainties. The forward-looking statements may prove to be incorrect. Many known and unknown factors could cause actual events or results to differ materially from the estimated or anticipated events or results expressed or implied by any forward-looking statements. All forward-looking statements made in this presentation are qualified by the foregoing cautionary statements.

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JORC CODE, 2012 EDITION – TABLE 1

SECTION 1 SAMPLING TECHNIQUES AND DATA

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.*	• Hand Auger samples of ~4m down hole intervals were collected below the interpreted topsoil horizon on sand dune.. • Sample was submitted to commercial laboratory for drying, splitting (if required), pulverisation in a tungsten carbide bowl, and XRF analysis • Sampling techniques are mineral sands "industry standard' for dry beach sands with low levels of induration and slime. • As the targeted mineralisation is silica sand, geological logging of the auger material is a primary method for identifying mineralisation
Drilling techniques	• *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).*	• Sampling utilized a hand held sand auger of 50mm diameter to collect samples below the topsoil horizon •
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 have occurred due to preferential loss/gain of fine/coarse material.*	• Sand augering was used to collect a fresh sample below the soil horizon and sand samples was retrieved from the sand auger by spilling into clean plastic sample bag. • The sampling is preliminary and sampling bias was not considered and expected to be negligible. • At this preliminary stage, no relationship is evident between sample recovery and grade
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)*	• Geological logging of the total hole by field geologist, • The total auger hole is logged; logging includes colour, grain size, sorting, induration and estimates of HM, • Logging is captured in Excel spreadsheets, with daily update of field database and regular

Criteria	JORC Code explanation	Commentary
	photography. • *The total length and percentage of the relevant intersections logged.*	update of master database.
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.*	• No sub-sampling was completed, all samples were submitted for sample preparation whole. • Sample size is considered appropriate for the material sampled. • Where topsoil was present, it was discarded for this program as it wasn't representative of the material below in the sand dune
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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• Drilling samples were submitted to ALS Townsville, where they were dried, weighed and split. • Analysis will be undertaken by ALS Brisbane utilizing a Tungsten Carbide pulverization, ME-XRF26 (whole rock by Fusion/XRF) and ME-GRA05 (H_2O/LOI by TGA furnace) • Particle Size Distribution (PSD) analysis for grading purposes on a sub-set of samples.
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.*	• Significant intersections validated against geological logging and local geology / geological model. • Sampling is preliminary and the results are used to confirm the existence of silica sand and used to design an exploration program to better quantify silica sand quantity and quality. • All data captured and stored in both hard copy and electronic format
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 sample were located using handheld GPS with an accuracy of 5m for X,Y. • UTM coordinates, Zone 55L, GDA94 datum. • Topographic surface generated from processing Stereo WorldView-3 satellite imagery and DGPS control points, collar RL's levelled against this surface to ensure consistency in the database.
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*	• Preliminary sampling pattern was designed to test the Target area generated using aerial photography. • All Target areas were tested in at least one location.

Criteria	JORC Code explanation	Commentary
	procedure(s) and classifications applied. • *Whether sample compositing has been applied.*	• Additional sampling was completed across the tenement where access was available.
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 dune field has ridges dominantly trending 320° - 330°. • The drill access tracks typically run along or sub-parallel to dune ridges which suggests unbiased sampling, some cross dune tracks linking the ridges were also drilled.
Sample security	• *The measures taken to ensure sample security.*	• Sample collection and transport from the field was undertaken by company personnel following company procedures. • Samples were delivered direct to ALS in Townsville by DRX personnel.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• There has been no audit or review of sampling techniques and data at this time.

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	• *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.*	• The Cape Bedford Project occurs within EPM17795 in Queensland and is held by Diatreme Resources. • The tenement is in good standing • A Compensation and Conduct Agreement, and a Cultural Heritage Agreement is in place with the landholder and native title party (Hopevale Congress)
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Previous exploration has been carried out in the area during the 1970's by Ocean Mining and 1980's by Breen Organisation. • The historical exploration data is of limited use since it comprises shallow hand auger drilling and is typically not accurately located.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The geology comprises variably re-worked aeolian sand dune deposits associated with a Quaternary age sand dune complex. • Mineralisation occurs within aeolian dune sands.

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.*
		• A tabulation of the sand auger sample sites is presented in the main body of this report.
		• All auger holes were drilled vertically (-90°)
		• No topsoil was sampled

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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.*	• The assay data is presented.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *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 (eg 'down hole length, true width not known').*	• As the mineralisation is associated with aeolian dune sands the majority will be essentially horizontal, some variability will be apparent on dune edges and faces. • All drilling is vertical; hence the drill intersection is essentially equivalent to the true width of mineralisation.
Diagrams	• *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.*	• A map of the drill collar locations is incorporated with the main body of the announcement. • No sections have been generated as all data is limited to near surface.
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 exploration assay results have been reported at this time.
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.*	• Geological observations are consistent with aeolian dune mineralisation • No bulk density measurements have been undertaken • The mineralisation is unconsolidated sand • There are no known deleterious substances at this time. • There are no known deleterious substances at this time. • No metallurgical test work is planned at this preliminary stage • Metallurgical test results from the Nob Hill Deposit nearby in the same geological units demonstrate the existence of a high-quality glass grade silica sand.
Further work	• *The nature and scale of planned further work (eg 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.*	• Further work is being planned and will be based on results. • Exploration will initially be limited to additional sand auger work to further test priority sand dunes for both sand quality and depth. • Positive results will result in track clearing and Air-core drilling. • The areas of possible extensions are considered to be potentially politically and culturally sensitive, and not appropriate for publishing at this time.