

ASX

ANNOUNCEMENT



TRADITIONAL LAND OWNER AGREEMENT SIGNED FOR CAPE BEDFORD EXPLORATION

Diatreme Resources Limited is an Australian based diversified mineral explorer with significant projects in WA and QLD.

The Board and senior personnel exhibit wide experience, ranging through the exploration, development and financing phases of resource project management.

Australian Securities Exchange
Codes: DRX

Board of Directors
Non-Executive:
William Wang - Chairman
Andrew Tsang
Daniel Zhuang

Executive:
Neil McIntyre – Chief Executive
Tuan Do – CFO & Co. Secretary
Ian Reudavey – Chief Geologist

Key Projects:
• Cyclone Zircon Project
• Tick Hill Gold Project
• Cape Bedford Silica/HMS Project
• Clermont Copper Project

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18th January 2017

- **Compensation and conduct agreement (CCA) signed with traditional land owners, the Hopevale Congress Aboriginal Corporation, for Cape Bedford Silica/Heavy Minerals Project.**
- **Tenement exploration program to commence at North Qld project located near world's biggest silica mine.**

Exploration is set to commence at Diatreme Resources Limited's (ASX:DRX) Cape Bedford Silica/Heavy Minerals Project in North Queensland, following the signing of a conduct and compensation agreement (CCA) with the traditional owners, the Hopevale Congress Aboriginal Corporation. The successful conclusion of the CCA will ensure the traditional owners share in the potential economic benefits of this new project, located near the world's biggest silica mine.

Commenting on the agreement, Diatreme's CEO, Neil McIntyre said: "We are very pleased with the outcome and the positive feedback we received on the project from community meetings held with the traditional owners.

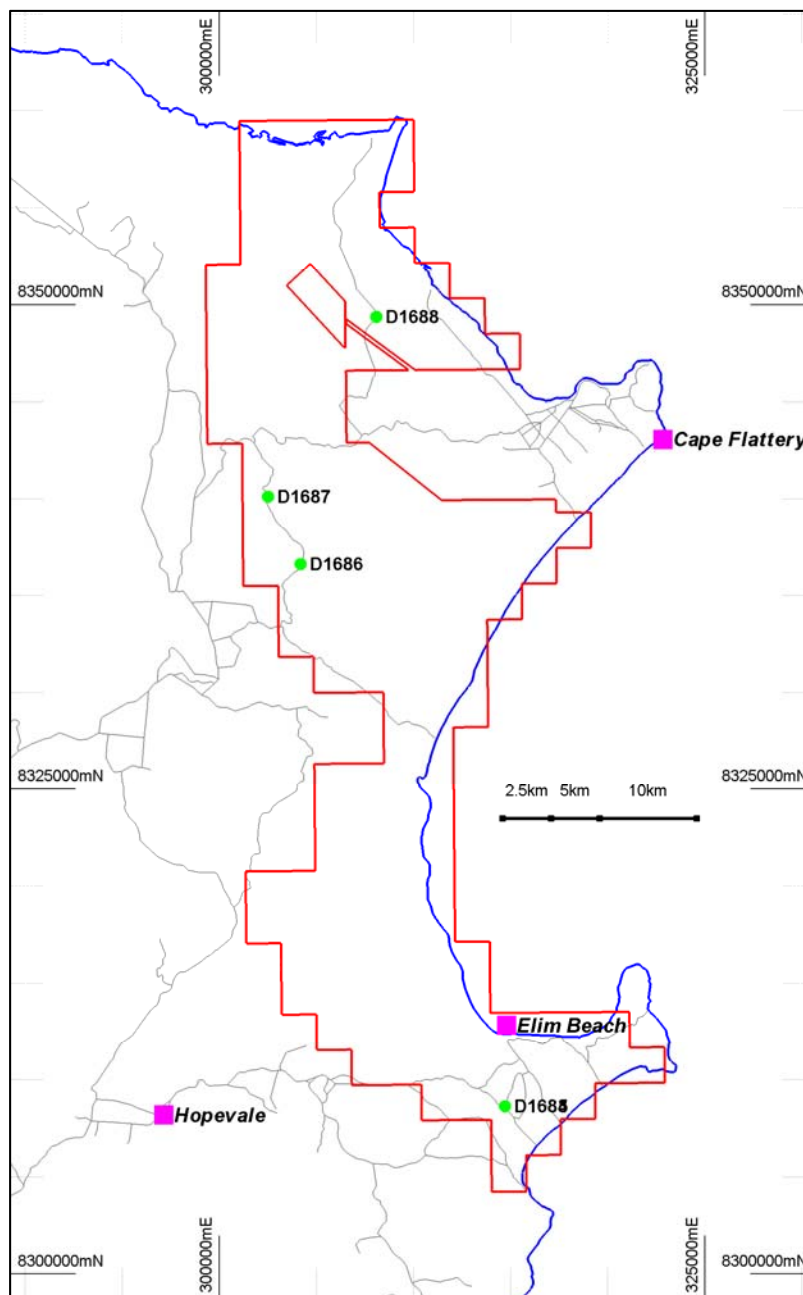
"While only limited exploration work has been undertaken to date, recent 'grab' samples taken from surface silica sand deposits at two sites showed elevated mineral sands content in areas not previously explored for heavy minerals. Whilst only indicative, these samples highlight the tenement's potential for heavy mineral deposits that could be mined in conjunction with the associated high purity silica sand.

"Diatreme has also been actively engaged in discussions with potential project participants for product offtake and direct project participation. We are very encouraged by the level of interest shown in the project and will update the market should any discussions progress to finalised agreements."

Six grab samples of silica sand were collected during a recent reconnaissance site visit to the dunefield at Cape Bedford as part of low impact exploration activity permitted prior to a CCA being signed. All samples were submitted for HM analysis and the two samples (D1686, D1687) that displayed visible HM mineralisation subsequently returned HM assays of 3.3% HM and 1.6% HM, respectively. Together with the observation of HM slicks on some of the exposed beaches, this suggests that HM mineralisation may be present at several locations within the EPM.

The silica “float” fraction of the reconnaissance grab samples was then submitted for XRF analysis, and all reported $\geq 99.8\%$ SiO_2 with low levels of Fe_2O_3 (average 0.014%) and Al_2O_3 (average 0.043%). This preliminary work confirms the potential of the widespread silica sand dune material to generate high-quality silica sand.

Sample locations are shown below and JORC Table 1 is attached.



Cape Bedford is located approximately 200km north of Cairns in North Queensland, and covers the extent of a large Quaternary sand dune field, part of which is currently being mined by Cape Flattery Silica Mines Pty Ltd (CFSM), a wholly owned subsidiary of Mitsubishi Corporation. Cape Flattery has operated since 1967 and is the world's largest silica sand mining operation.

Mr McIntyre added: "Cape Bedford adds to our flagship Cyclone Zircon Project as among our portfolio of highly prospective mineral sands projects. Together with our Tick Hill Gold Project, we are determined to advance our highest potential projects as quickly as possible in an environment of rising commodity prices, to generate wealth for shareholders and economic benefits for all stakeholders."

For further information, please contact:



Neil McIntyre, CEO

Competent Person Statement

The information in this report, insofar as it relates to Exploration Results is based on information compiled by Mr Ian Reudavey, who is a full time employee of Diatreme Resources Limited and a Member of the Australian Institute of Geoscientists. Mr Reudavey has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has 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 Reudavey consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> Sampling methods include a combination of shallow hand auger cuttings (D1683, D1684, D1685, D1687) or composite grab samples (D1686, D1688). As these are reconnaissance samples there have been no specific measures taken to ensure sample representivity. Heavy Mineral (HM) is defined as mineral grains within 45 to 1,000 µm size range with an SG greater than 2.9. HM mineralisation refers to grades more than 1% HM.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> Hand auger drilling utilizing a 62mm diameter Dormer sand auger.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> Visual assessment and logging of sample recovery and sample quality. No relationship is evident between sample recovery and grade.
Logging	<ul style="list-style-type: none"> Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> General observation of sample characteristics, as relevant for reconnaissance sampling.
Sub-sampling techniques	<ul style="list-style-type: none"> If core, whether cut or sawn and whether quarter, half or all core taken. 	<ul style="list-style-type: none"> Field sample was riffle split to ~2kg prior to submission to laboratory Sample was dried, screened and washed to determine oversize and

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<i>and sample preparation</i>	<ul style="list-style-type: none"> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>slimes content in laboratory preparation facility. 100g sample for HLS (HM assay) is riffle split from homogenized screened and de-slimes sample.</p> <ul style="list-style-type: none"> • Standard laboratory quality control procedures were used. • Sample size is considered appropriate for the material sampled.
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • Sample preparation and HM analysis undertaken by recognised independent HM laboratory (Diamantina Labs) utilizing TBE. • No duplicates and external laboratory checks have been undertaken for HM due to small batch size • Sample preparation and Silica analysis undertaken by recognised independent HM laboratory (ALS) utilizing ME-PKG85 technique
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • Not applicable to reconnaissance sampling.
<i>Location of data points</i>	<ul style="list-style-type: none"> • <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • All samples located using handheld GPS with an accuracy of 10m. • UTM coordinates, Zone 55 L, GDA94 datum. • No topographic control has been used.
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>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.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Reconnaissance samples at random spacing dependent upon vehicular access and dune formation. • Data spacing not applicable for exploration results. • No sample compositing.
<i>Orientation of data in</i>	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering</i> 	<ul style="list-style-type: none"> • Not applicable to reconnaissance sampling.

Criteria	JORC Code explanation	Commentary
<i>relation to geological structure</i>	<p><i>the deposit type.</i></p> <ul style="list-style-type: none"> <i>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.</i> 	
<i>Sample security</i>	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Sample collection and transport from the field undertaken by company personnel.
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> Not applicable to reconnaissance sampling.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> EPM17795 held by Diatreme Resources. A Compensation and Conduct Agreement is currently being negotiated with Hopevale Congress to facilitate access for exploration drilling. The tenement is in good standing.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> There has been limited exploration activity within the area of EPM17795 and the age and quality of available results suggests that exploration by other parties is of limited use.
<i>Geology</i>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> 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. Mineralisation comprises elongate parabolic sand dunes of silica sand, with scattered zones of HM enrichment from wind deflation and possibly buried/preserved beach strandlines.
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <i>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:</i> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> 	<ul style="list-style-type: none"> No systematic drilling has been undertaken, therefore not applicable at this time.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> ○ 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. 	
Data aggregation methods	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● Not applicable to reconnaissance sampling.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> ● These relationships are particularly important in the reporting of Exploration Results. ● If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. ● If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> ● Not applicable to reconnaissance sampling.
Diagrams	<ul style="list-style-type: none"> ● Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> ● A map of the sample locations is included in the body of the announcements.
Balanced reporting	<ul style="list-style-type: none"> ● Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	<ul style="list-style-type: none"> ● Not applicable to reconnaissance sampling.
Other substantive exploration data	<ul style="list-style-type: none"> ● Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	<ul style="list-style-type: none"> ● Geological observations are consistent with a large Quaternary dune field comprising abundant white sand dunes, and the presence of HM slicks suggest appropriate conditions may exist for enrichment and concentration of HM mineralisation within parts of the landscape.
Further work	<ul style="list-style-type: none"> ● 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. 	<ul style="list-style-type: none"> ● Reconnaissance aircore drilling will be undertaken along existing access to define the depth of silica sand mineralisation within the dunes. ● Reconnaissance hand auger and aircore drilling will be undertaken to investigate the potential for HM mineralisation within the dune profile.