

# ANNUAL REPORT 2017



# 2017



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#### **Corporate Directory**

#### **Board of Directors - Non-executive**

Cheng (William) Wang - Chairman Gregory Starr Andrew Tsang Yufeng (Daniel) Zhuang

#### **Chief Executive**

Neil McIntyre

#### **Company Secretary**

Tuan Do

#### **Registered and Principal Office**

Unit 8, 55-61 Holdsworth Street Coorparoo QLD 4151 Telephone: 07 3397 2222 Email: manager@diatreme.com.au Website: www.diatreme.com.au

#### **Share Registry**

Link Market Services Limited Level 21, 10 Eagle Street Brisbane QLD 4000 Telephone: 1300 554 474

#### **Auditors**

William Buck (Qld) Level 21, 307 Queen Street Brisbane QLD 4000

#### **Securities Exchange**

Australian Securities Exchange (ASX: DRX)

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#### Chairman's Review 2017

Bold achievements and strong leadership are said to be common of rooster years in the Chinese zodiac. The past year 2017 was no exception for your Company as we marked some major achievements, which thanks to our strategic vision have laid the foundations for strong growth.

These achievements, notably at our flagship Cyclone Zircon Project in Western Australia and also our emerging Cape Bedford Silica/Heavy Minerals Project in Queensland, have resulted in significant growth in market value. More gains are expected this year as we capitalise on the opportunities in front of us.

#### Cyclone rapidly advancing

The year began with a major announcement, with final ministerial approval received from the Western Australian Government allowing for Cyclone's development.

Under the ministerial consent received on January 9, Diatreme's subsidiary Lost Sands Pty Ltd was given permission to "develop and operate the Cyclone Mineral Sands Mine, including open cut pits, mining and processing infrastructure, airstrip, accommodation camp, bore fields and haul road construction from the mine site to the Forrest rail siding."

This approval marked the completion of an extensive de-risking process aimed at making Cyclone as attractive as possible to investors and project partners.

This process included the discovery of a necessary water supply for the project; a Native Title and Mining Agreement with the traditional land owners; the award of a Mining Lease by the WA Government; the extension of Cyclone's potential mine life with the acquisition of the adjacent Cyclone Extended; and an independent "Project Enhancement and Update Study" to enhance the project's economics.

Capitalising on Cyclone's de-risking, in June 2017, we announced advanced discussions were underway with a number of potential Chinese offtake partners, including those with access to the necessary project finance.

Proof of progress came in September, when we signed a non-binding Memorandum of Understanding (MOU) with China ENFI Engineering Corporation (ENFI) for the completion of Cyclone's bankable feasibility study (BFS).

Backed by one of China's largest state-owned enterprises, ENFI is a wholly owned subsidiary of China Metallurgical Group Corporation, part of the world-leading China Minmetals Corporation. Based in Beijing, China Minmetals has an estimated 1.6 trillion renminbi (A\$327 billion) in total assets and ranked 120<sup>th</sup> in the Fortune Global 500 for 2016, placing first among global metal enterprises.

Significantly for Diatreme, the MOU with ENFI comprised both the delivery of the BFS as well as assistance in sourcing potential project equity or joint venture parties from within its extensive network in China, as well as facilitating agreement with banking consortia to secure the necessary project financing.

Having a partner of such global status is testimony to the quality of the Cyclone project and its attractiveness internationally as a world-class source of zircon. Naturally we were delighted with the agreement and look forward to further enhancing our relationship with ENFI, for the benefit of both parties.

Post-balance date, in January 2018 we announced the signing of Cooperation and Consulting Services agreements with ENFI, replacing the previous non-binding MOU and paving the way for Cyclone's development as WA's next major mineral sands mine.

The market's view of this agreement was readily apparent, with Diatreme shares hitting new highs on the day of the announcement on the back of significant trading volume. This was followed by substantial media coverage heralding the arrival of this ground-breaking project for the benefit of all stakeholders.

In April 2018, Diatreme announced strong interest from a range of parties interested in providing potential project construction, finance and product offtake.

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With the DFS expected early in the third quarter 2018, the Company is positioned for a significant rerating as investors better appraise Cyclone's value amid a favourable environment for new heavy mineral sands (HMS) projects.

#### Valuable project pipeline

Together with Cyclone, Diatreme's mineral sands portfolio also includes the Cape Bedford project, which picked up speed over the past year as a project offering significant potential for high-quality silica sands.

In January 2017, Diatreme announced the signing of an agreement with the Hopevale Congress, allowing the Traditional Owners to share in the economic benefits from this new project.

Located around 200km north of Cairns and near the world's biggest silica sand mining operation at Cape Flattery, Cape Bedford is extremely well positioned to capitalise on rising Asian demand for silica sand in construction, automotive and other emerging industries.

Silica sand has enjoyed healthy growth, with researchers IMARC Group forecasting demand to show a compound annual growth rate (CAGR) of 7.2 per cent through to 2022, reaching annual revenues of US\$9.6 billion, principally from the glass, foundry, hydraulic fracturing and other industries.

Similarly, construction sand has become a major global industry, with growing demand from Asian markets including India, Singapore and Vietnam, in line with the region's continued industrialisation and urbanisation.

Post-balance date, in March 2018 we announced results from initial metallurgical testwork that showed Cape Bedford's potential to produce high quality, glass-grade silica sand. Pending the necessary approvals, further reconnaissance drilling is planned this year to explore what could prove a highly valuable addition to our project pipeline.

Elsewhere, we continue to evaluate opportunities to unlock value from other projects such as the Tick Hill Gold Project and the Clermont Copper Project, aiming to minimise expenditure commitments while maximising potential gains for shareholders.

#### **Board strengthened**

The past year has also seen a further strengthening of Diatreme's Board, in preparation for our progression from a minerals explorer to profitable producer.

In October 2017, highly experienced mining industry executive, Mr Gregory Starr, joined Diatreme as an independent Non-Executive Director. With more than 20 years' international experience, Mr Starr has served as managing director of various listed mining companies on the Australian and Canadian stock exchanges, with considerable merger and acquisition and capital raising expertise.

His appointment has added to an already experienced Board and management team with experience across all stages of mining project development. We are determined to ensure we have the right personnel in the right places to advance our projects, while maintaining our strong commitment to corporate governance.

Earning a social licence to operate is crucial to our success as a mining company and we are cognisant that this right is earned, not awarded.

We are also thankful to our loyal shareholders and new investors alike for supporting our capital management initiatives over the past year, which stand the Company in good stead to advance our key projects.

#### Positive outlook

Looking ahead, the outlook for Diatreme is encouragingly positive on the back of our projects' successful development and a positive market environment.

Backed by ENFI's considerable support, Cyclone is rapidly advancing towards development in an environment of rising demand and constrained supply. With mineral sands prices rising, industry commentators have pointed to the need for new projects and Cyclone is perfectly placed to deliver.

Together with Cape Bedford, our refocus as a mineral sands miner has the Company positioned to achieve substantial growth in market value.

Globally, the world economy is currently enjoying synchronized global growth for the first time since the global financial crisis. With China showing continued economic strength, the outlook for resources appears highly promising, as seen by the improved exploration activity domestically and growing investor confidence.

If bold achievements and strong leadership were hallmarks for 2017, qualities such as faithfulness, honesty and loyalty are characteristics for 2018, Asia's Year of the Dog.

In this spirit, I would like to thank our faithful employees, shareholders, suppliers, contractors and all other stakeholders for contributing to our Company's successful growth. The year ahead offers tremendous opportunity for Diatreme and I hope you will stay with us to enjoy the rewards.

William Wang

**Non-executive Chairman** 

## **Operations Report**

#### INTRODUCTION

During 2017, Diatreme Resources Limited ("Diatreme") maintained its ongoing focus on advancing development activities and mineral exploration within Australia, particularly targeting the Company's West Australian Cyclone Zircon Project and Queensland's Cape Bedford Silica Sand Project.

The process of commercially and technically de-risking Diatreme's major asset, the Cyclone Project, continued with advancement of final project permitting, this project now has all primary approvals in place allowing a "fast track" to actual mine development on finalisation of commercial and technical studies. This has also allowed the process of engagement with potential Chinese mine product offtakers, end-users, investors and engineering corporations to rapidly gain momentum.

In Queensland, the Cape Bedford EPM covering the extent of a large Quaternary sand dune field, part of which is currently being mined by Cape Flattery Silica Mines Pty Ltd, progressed through a Compensation and Conduct Agreement and Cultural Heritage Agreement process with Hopevale Congress. Reconnaissance exploration in the southern EPM area returned significant results for silica sand potential.

Diatreme continued with its focus of tenement consolidation and prioritising of expenditure towards projects that have highest potential for adding material value to the company and ultimately to its shareholders through major discovery or transition to mining operations.

Diatreme is well placed to start to unlock significant company value into the 2018 year as these projects further advance and develop.

#### **MINERAL SANDS**

#### **CYCLONE ZIRCON PROJECT**

Discovered in 2007, the Cyclone Zircon deposit is located along the Barton shoreline within the Wanna Lakes area of the northern Eucla Basin, 25 kilometres from Western Australia's state border with South Australia and 220 kilometres north of the transcontinental railway.

Following the acquisition of the Cyclone Extended Heavy Mineral Resource, the Cyclone Project's JORC Mineral Resource (Measured and Indicated) has been estimated at comprising 211 million tonnes at 2.3% heavy minerals (1% cut-off grade) containing 4.8 million tonnes HM. The Cyclone Mineral Resource estimate was updated in 2017 and is currently reported as 203 Mt at 2.3% HM (at 1.0% HM cut-off grade), containing 4.70Mt of HM (refer ASX announcement 27 April 2017).

In November 2014, Western Australia's Department of Mines and Petroleum granted a Mining Lease (ML69/141) for the project, which followed the signing of a Project Agreement with the traditional owners, the Spinifex People.

Following exhaustive technical studies by Diatreme and its external environmental consultants, the Cyclone Project Public Environmental Review document received a positive recommendation from the WA Environmental Protection Authority (EPA) in August 2016 and ministerial consent in early January 2017.

A Project Enhancement and Update Study was completed by independent consultants Sedgman Limited in June 2016 which reaffirmed the project's financial viability. An updated estimate of processing plant capital and operating costs, shipping and diesel costs, together with revenue stream adjustment for current product pricing returned a projected net present value of \$121 million, an internal rate of return of 23% and payback in 2.8 years.

A Definitive Feasibility Study is currently underway along with further project specific commercial and operational enhancement studies, with Cyclone representing potentially the largest undeveloped zircon project in the Eucla Basin.

#### **Environmental Assessment**

A Public Environmental Review (PER) process for the project was required for approval of the haul road from Cyclone to the Forrest rail siding. The PER also incorporates the mine site and mine infrastructure, including the accommodation camp, water supply and airstrip.

The PER Report for the Cyclone Project was released for public review in late June 2015 for a period of five weeks as required by the WA Environmental Protection Authority (EPA). The Office of the Environmental Protection Authority (OEPA) received submissions from eight respondents during the public review period and provided copies of the submissions to DRX in late August 2015. DRX submitted its report responding to the public submissions in October 2015 to the OEPA, and more detailed information following further requests from the OEPA in November 2015. The OEPA assessed the additional PER response submitted in January 2016, and released draft endorsed conditions to Diatreme in May 2016. for review and comment. The EPA publicly issued a recommendation in early August 2016 advising that the Cyclone (Eucla Basin) project meets its requirements for consent subject to its recommended terms and monitoring conditions, with positive recommendations for approval made to the WA Minister of Environment. During an additional public review period of the recommendations in August, two appeals were received, and these were managed and assessed by an extensive referral process.

Final ministerial consent (approval) was received on 9 January 2017 (Ministerial statement No:1052), allowing the Cyclone project to: "Develop and operate the Cyclone Mineral Sands Mine, including open cut pits, mining and processing infrastructure, airstrip, accommodation camp, bore fields and haul road construction from the mine site to the Forrest rail siding."

As part of the approvals process DRX negotiated an offsets package for the proposed disturbance to the Great Victoria Desert Nature Reserve which will result from construction of the haul road from the Cyclone mine to the Forrest rail siding.

Diatreme had previously referred the project to the Commonwealth Department of the Environment (DoE) for consideration under the EPBC Act. Information on the project was made available for public review and comment as part of the assessment process by the DoE. The DoE subsequently provided written notice to Diatreme that the proposed action for the Cyclone Project is not a controlled action and it does not require any further assessment or approval under the EPBC Act before it can proceed. This assessment confirmed that the WA process through the EPA is the sole environmental approval process for the project.

#### **Water Supply Assessment**

The availability of a suitable water supply for the Cyclone project was confirmed in late 2013 with the discovery of a massive high yielding groundwater aquifer in the Officer Basin sediments beneath the planned mine area. A bore was constructed to a depth of 812 metres to test the sediments and discovered high yielding sandstone formations which commenced at a depth of 530 metres and continued for the full depth of the bore.

An estimated flow rate up to 40 litres per second was obtained from the bore using the drill rig to air lift the water. The water quality at 25,000 ppm total dissolved solids is better than expected and is a good quality supply for the mine and processing plant. The potable water supply for the accommodation camp will require a desalination plant which will use the bore water.

The test bore is planned to be used as a production bore to form part of the Cyclone project borefield. The current estimate is for a network of at least ten bores to a depth of approximately 650 metres to supply the 7.8 gigalitres of water required for the mine, wet concentrator plant, and all other site uses each year. The test bore results confirmed that the capital cost estimate for water supply used in the financial evaluation of the project was appropriate. A pump test will be completed as part of the DFS to confirm the borefield design and obtain information to confirm the operating costs for the water supply system.

#### **Process and Plant Design**

DRX engaged Sedgman Limited, a leading provider of mineral processing and associated infrastructure solutions to the mineral sands industry, to undertake a "Project Enhancement and Update Study" in mid-

2016. The study identified opportunities for cost reductions and evaluated the project economics for a possible construction schedule which would commence on completion of the DFS.

Sedgman reviewed work undertaken for the PFS and subsequent studies and provided an updated assessment of process plant, some infrastructure and shipping costs and assumptions at a technical and commercial level. Using the previous PFS financial model the study outcomes demonstrated the following financial results for the project:

- > NPV of \$121M
- IRR of 23%
- Payback in 2.8 years

The project analysis was based on sale of heavy mineral concentrate (HMC) to processors in China and the HMC price was determined by calculating a reasonable proportion of the value of the contained final products based on the financial model previously developed by Diatreme for the PFS in 2012.

Current industry and market conditions have presented considerable opportunities for cost savings on key capital and operating expenditures, compared to the Prefeasibility Study. Sedgman's study revealed reduced transport and operating costs resulting from the changed global economic circumstances during the four years since the Cyclone PFS was completed.

Sedgman reviewed the capital cost of the WCP which was based on the PFS testwork and the WCP flowsheet completed by Mineral Technologies in 2011. The \$60M estimate for the capital cost of the plant using similar technology separating equipment was verified by Sedgman as a valid current estimate.

Based on this updated work, the revised cost estimates for the project are:

- \$161M project capital expenditure
- \$72M average annual operating cost.

As part of the overall study Diatreme reviewed the mining schedule and a revised schedule was produced to increase the average grade mined during the first three years of the operation. The joint study confirmed the viability of the Cyclone Project and provided DRX with an independent consultant's financial analysis which shows improvements to the project economics.

During September 2017 Diatreme signed a Memorandum of Understanding with China ENFI Engineering Corporation (ENFI) for the completion of the Cyclone Zircon Project's Bankable Feasibility Study (BFS). ENFI is backed by Metallurgical Corporation of China, one of China's largest state-owned enterprises involved in the mining services sector, being a wholly owned subsidiary of the China Minmetals Group. ENFI will undertake the Cyclone project's high-level engineering design and planning required to facilitate definitive final project costings, implementation and economics. ENFI have also agreed under the MOU to assist Diatreme in sourcing potential project equity or joint venture parties from within its extensive network, as well as facilitating engagement with Chinese banking consortia to assemble the project financing necessary for the mine's construction.

Diatreme and ENFI successfully negotiated the terms of an agreement during December 2017, and in early January 2018 signed two contracts comprising:

- A Cooperation Agreement, under which ENFI will use its network within China's state-owned enterprise (SOE) and banking sectors to assist in sourcing project investors, offtakers and project debt funding;
- A **Consulting Services Agreement**, detailing the remaining DFS aspects to be completed by ENFI, including project costings and economics, engineering studies and implementation planning. Timeframe for DFS completion is estimated at five months.

#### **Cyclone Mineral Resource**

DRX expanded the resource base of the Cyclone Zircon Project with the acquisition of the Cyclone Extended resource (tenement R69/1) from Image Resources Ltd in 2015. The addition of Cyclone Extended increased the size of Diatreme's mineral sands project in Western Australia's Eucla Basin to a mineral resource of 211 Mt with an average grade of 2.3% HM (ASX announcement 9 April 2015). This was an effective 60% increase in contained heavy minerals over the original DRX Cyclone resource.

As part of the Annual Review of Diatreme's Mineral Resources and Ore Reserves, the Cyclone Mineral Resource estimate was updated. A revised resource estimate for the Cyclone Mineral Resource is

reported as 203 Mt at 2.3% HM (at 1.0% HM cut-off grade), containing 4.70Mt of HM (ASX announcement 27 April 2017).

The change in the Mineral Resource primarily reflects the exclusion of Nearshore mineralisation within E69/2425 (which was surrendered during 2016), with minor changes to the global mineralisation wireframes also being made as part of the update. Approximately 8 Mt of low grade Nearshore mineralisation containing 90 kt of HM on the SW margin of the Cyclone Mineral Resource was excised.

**TABLE 1: CYLONE RESOURCE ESTIMATE** 

	НМ	Material	НМ	НМ	Slime	os			Head	Grade			Zircon
Category	cut-off %	Mt	%	Mt	%	%	Zircon %	Rutile %	Leuco %	HiTi %	Alt Ilm %	Si TiOx %	Kt
MEASURED	2.0	69	3.7	2.58	3.6	3.8	1.06	0.11	0.24	0.88	0.45	0.82	735
MEASURED	1.5	102	3.1	3.14	3.9	4.4	0.88	0.09	0.20	0.73	0.38	0.67	896
MEASURED	1.0	156	2.4	3.81	4.2	5.0	0.69	0.07	0.16	0.58	0.30	0.53	1,079
INDICATED	0.0	40	0.0	0.44		4.4	0.00	0.07	0.40	4.00	0.55	0.00	
	2.0	13	3.2	0.41	3.8	4.4	0.66	0.07	0.18	1.06	0.55	0.60	83
INDICATED	1.5	24	2.5	0.60	4.1	5.0	0.52	0.05	0.12	0.84	0.41	0.46	123
INDICATED	1.0	48	1.9	0.89	4.4	5.1	0.38	0.04	0.09	0.62	0.30	0.34	183
TOTAL	2.0	82	3.6	2.99	3.6	3.9	1.00	0.10	0.23	0.91	0.47	0.79	818
TOTAL	1.5	126	3.0	3.75	3.9	4.5	0.81	0.08	0.18	0.75	0.38	0.63	1,019
TOTAL	1.0	203	2.3	4.70	4.2	5.0	0.62	0.06	0.14	0.59	0.30	0.49	1,262
	Mineral Assemblage 27% 3% 6% 26% 13% 21%												
			CY	CLONE	RESOL	JRCE E	STIMAT	E BY D	OMAIN				
					ST	RAND D	OMAIN						
MEASURED	1.0	18	6.0	1.08	3.0	2.9	1.74	0.17	0.40	1.42	0.68	1.42	311
INDICATED	1.0	1	6.3	0.08	2.8	3.5	1.35	0.14	0.40	1.79	1.03	1.32	18
TOTAL	1.0	19	6.1	1.17	3.0	2.9	1.71	0.17	0.40	1.44	0.71	1.42	328
			Strar	nd Miner	al Asser		28%	3%	7%	24%	12%	23%	
					BI	EACH D	OMAIN	1	1		1		
MEASURED	1.0	110	2.1	2.28	4.3	4.7	0.57	0.06	0.14	0.49	0.29	0.43	631
INDICATED	1.0	35	1.8	0.65	4.5	3.8	0.35	0.03	0.09	0.63	0.35	0.31	123
TOTAL	1.0	145	2.0	2.93	4.3	4.5	0.52	0.05	0.13	0.52	0.31	0.40	754
			Bead	ch Miner	al Asser		27%	3%	6%	26%	13%	21%	L
NEARSHORE DOMAIN													
MEASURED	1.0	28	1.6	0.44	4.6	7.8	0.49	0.06	0.05	0.42	0.08	0.36	137
INDICATED	1.0	11	1.4	0.16	4.2	9.4	0.38	0.04	0.04	0.47	0.06	0.30	43
TOTAL	1.0	39	1.5	0.60	4.5	8.3	0.46	0.05	0.05	0.43	0.07	0.34	179
			Nearsho	re Miner	al Asser	nblage	30%	3%	3%	28%	5%	22%	

The Zircon content of the HM is estimated at 27% (comprising 1.26 Mt of zircon in the mineral resource), – confirming Cyclone's status as one of the highest zircon grade projects awaiting development. The estimate again highlights the low levels of slimes (-53um) at 4.2% and oversize (>2mm) at 5.0% within the Cyclone mineralisation. These characteristics are conducive to simple, low cost, mining, processing and tailing operations.

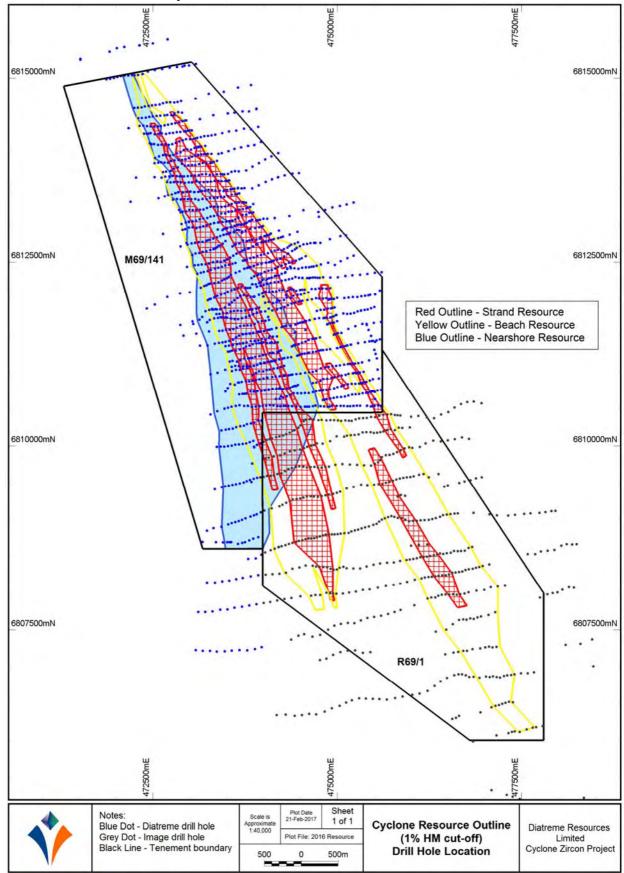
Cyclone is interpreted as a Tertiary beach strandline HM system with analogies to Iluka's Jacinth/Ambrosia HM deposit in the eastern Eucla Basin. Mining and processing of beach strandline deposits is well understood and has formed the basis of global mineral sands production to date.

The geological interpretation of the Cyclone mineralisation includes 3 distinct geological domains;

- a "Beach" domain of well sorted marine and reworked dunal sands occurring as 2 broadly tapered elongate mineralised sand units originating from a common point and extending for over 7km
- a "Strand" domain of higher grade (>4%) HM mineralisation occurring as a series of continuous elongate strandline features within the broader "Beach" domain.
- A "Nearshore" domain of bimodal marine sands with fine grained HM mineralisation underlying the western beach unit and extending for over 7km as an arcuate feature.

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Although these domains display some distinctive geological characteristics, they are expected to be extracted as a combined body of mineralisation.



**Cyclone Mineral Resource and Drilling** 

#### **Cyclone Ore Reserve**

A Probable Ore Reserve of 140 Mt at an average grade of 2.5% HM was announced in December 2015. However, the integration of Cyclone Extended into the Cyclone Project allows for a wider range of options in mine planning and design including targeting higher grade ore at the commencement of mining and could also include higher production levels while maintaining a long-life operation.

An update to the Probable Ore Reserve was completed as part of the Project Enhancement and Update Study, with a Probable Ore Reserve estimate for the Cyclone Project now reported as 138 Mt at 2.6% HM, including 0.72% Zircon, containing 3.5 Mt of HM, including 1 Mt of Zircon (ASX announcement 15 June 2016). The revised estimate primarily relates to the adoption of a revised mining schedule which reduces the amount of lower grade "Nearshore" mineralisation (and associated interburden) mined from the deeper parts of the mine path and omits some lower grade "Beach" mineralisation on the western batter of the mine path in the first three years of operation.

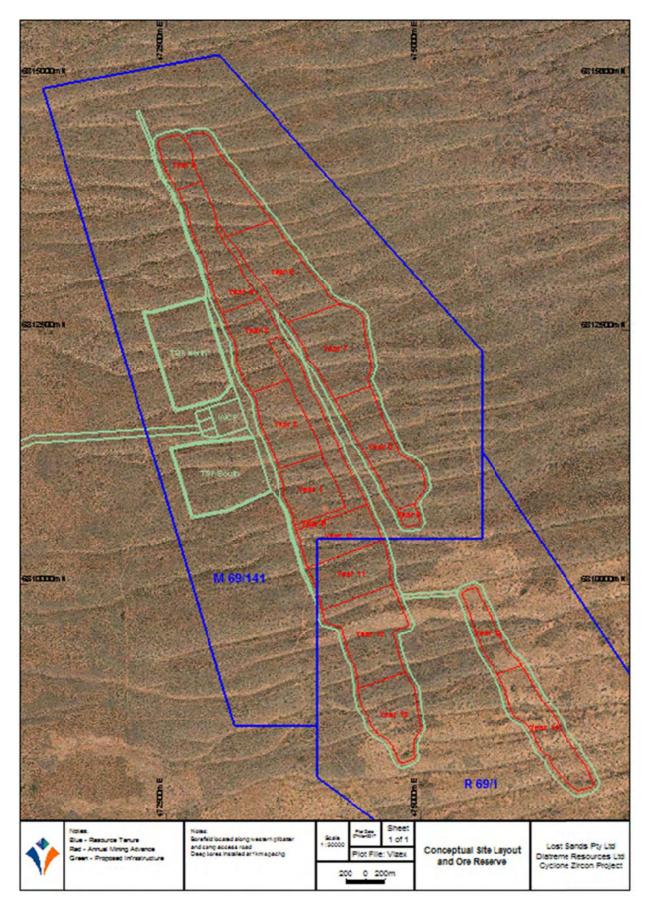
The Ore Reserve is based upon mine planning parameters developed for the Cyclone Prefeasibility Study, with appropriate recognition of subsequent metallurgical testwork and mine planning optimisation.

The design parameters for the open pit were developed based on simultaneous assessment of a number of economic and mining factors:

- A nominal 0.4% Zircon cut-off grade was applied. Lower grade material was included in areas with less overburden and where required to create a practical pit geometry for dozer trap mining.
- Areas with higher stripping ratios required a higher-grade ore to be economic.
- The base of induration (within the Quaternary weathering profile) was used as the top of the ore zone to exclude indurated material (with poor quality HM) from mining.
- Low grade interburden material, which was not part of the Mineral Resource, was included in the pit design to allow mining of the Beach and Nearshore mineralisation in a single pass.
- Pit wall design used batter angles of 35° for ore and interburden (both unconsolidated sand) and 45° for overburden (variably indurated sandy loam).

The Ore Reserve has been classified as Probable based on the accuracy of the project cost estimates (PFS quality) and additional work required for the marketing of Cyclone HMC in China to more accurately define revenue. However, 90% of the Ore Reserve is derived from Measured Resource, and there is a high level of confidence in the other modifying factors applied. The Ore Reserve represents a 75% conversion rate from Mineral Resource for contained HM tonnes.

The Cyclone Mineral Resource comprises 203 Mt at an average grade of 2.3% HM containing 4.70Mt of HM. The Probable Ore Reserve has been estimated at 138 Mt at an average grade of 2.6% HM containing 3.52Mt of HM, representing a 75% conversion rate for contained HM tonnes. The pit design includes 83 Mbcm of overburden with a strip ratio of 1:1. The strip ratio is considerably lower in the early years of the mine operation.



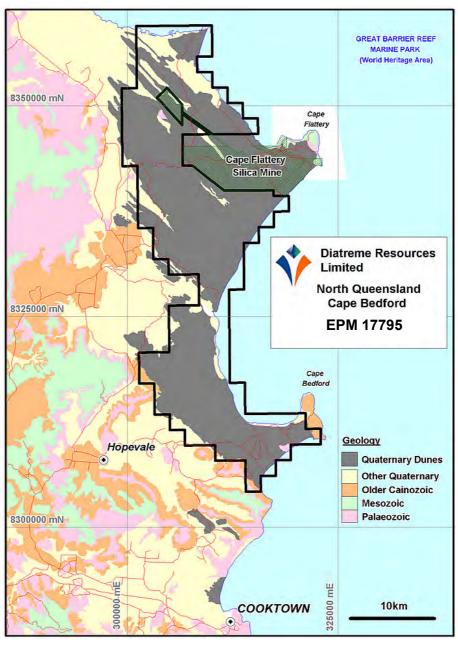
**Cyclone Ore Reserve and Site Layout** 

#### **CAPE BEDFORD PROJECT - NORTH QUEENSLAND**

The Cape Bedford EPM17795 lies some 40km north of Cooktown and covers most the Cape Bedford – Cape Flattery dunefield, surrounding the Cape Flattery silica sand mining operations of Mitsubishi Corporation. The EPM area 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 (see figure below), with large quantities of silica sand present and with the potential for heavy mineral sands underlying the silica sands.

EPM17795 was granted in June 2016 for a five-year term, and a Conduct and Compensation Agreement (CCA) with Hopevale Congress was negotiated throughout 2016 and executed in January 2017. Similarly, a Cultural Heritage Agreement was executed in June 2017.

Previous exploration has centred on the Cape Flattery area, within the Mining Leases of CFSM, but reconnaissance exploration has been carried out over the entire dunefield in the late 1960's and again in the early 1980's. This exploration confirmed the presence of both silica sand and heavy mineral sands, and Diatreme intends to build on the existing data and initially target those areas (e.g. Nob Point) where prospective silica sand dunes have been identified and access is readily available.



**Cape Bedford Project Tenement Locality Map** 

Diatreme's reconnaissance samples from 2016 confirm the potential of the widespread silica sand dune material to generate high-quality silica sand. Sample assays, together with the observation of HM slicks on some of the exposed beaches, suggests that HM mineralisation may be present at several locations within the EPM.

A preliminary metallurgical test was also undertaken on a 90kg sample of dune material collected from a road cutting immediately south of the Elim Beach campsite. The sample contained low levels of slimes (-45micron) and oversize (+1.0mm), and Heavy Mineral content was determined at 2.6%. The sample processed readily and initial work indicates the sands to be amenable to the use of standard mineral sands process methodologies and equipment.

Wet tabling produced a HMC which was then processed using a simple combination of magnetic separation, further wet tabling, electrostatic separation and magnetic separation to produce a primary ilmenite product, a potential secondary ilmenite concentrate, HiTi/Rutile concentrate and zircon concentrate. The primary ilmenite product contained 54% TiO2 and low levels of contaminants, particularly  $\text{Cr}_2\text{O}_3$  and U+Th. The other titanium concentrates display positive characteristics suggesting that chloride grade ilmenite and HiTi products could be produced with further detailed processing. The zircon concentrate returned low levels of  $\text{Fe}_2\text{O}_3$  and U+Th.

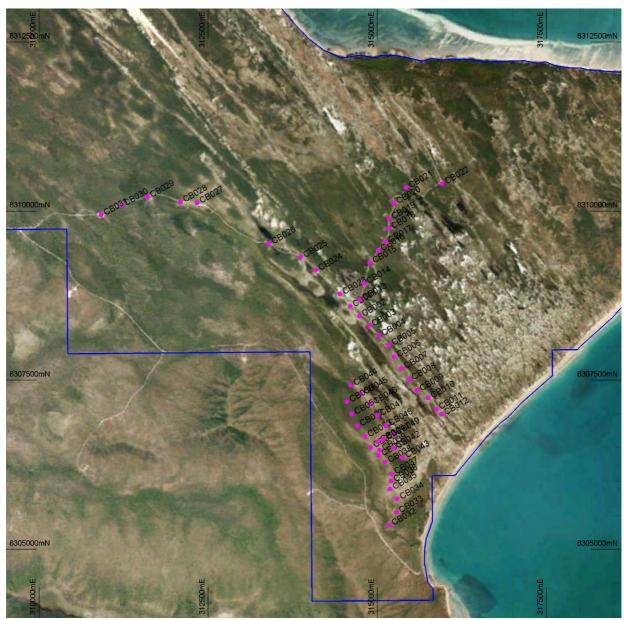
During September 2017, 29 holes were drilled along Elim Road and a related beach access track, for a total of 606m with an average hole depth of 21m. The logged geology was reasonably consistent in defining large areas of fine grained quartz sand, but groundwater was typically encountered at relatively shallow depths. Holes drilled along the central part of the Elim Road returned good thicknesses of fine grained white quartz sands from surface, and assay results support the logging with an average 98.9% SiO<sub>2</sub> reported for the samples submitted for analysis.

During October 2017, 26 holes were drilled along cleared access tracks over a dune complex near Nob Point, for a total of 670m with an average hole depth of 26m. The logged geology was reasonably consistent in defining large areas of fine grained quartz sand. Several large zones of white, fine grained quartz sand extending over 400m in length along the dune ridges were evident from surface down to 30m depth, with potential to represent a body of sand with sufficient size that may allow large scale sand extraction for commercial purposes. Assay results support the logging with an average  $99.2\%~SiO_2$  reported for the samples submitted for analysis.

The assay results are considered encouraging given they are as-drilled samples, with no sample preparation (e.g. washing, HM removal) as would typically be carried out during silica sands processing.

The reconnaissance air-core drilling has allowed a general understanding of the dune geology and returned results that confirm both the exploration potential of a significant silica sand deposit in the area. Bulk samples of approximately 100kg each from six separate drill holes were submitted for preliminary metallurgical testwork to assess the potential to generate a high-quality silica sand product from the white quartz sands intersected from the October drilling program.





**Cape Bedford Reconnaissance Drilling Location** 

#### **METALS**

#### TICK HILL GOLD PROJECT - NORTHWEST QUEENSLAND

The Tick Hill Gold Project comprises three granted Mining Lease No's 7094, 7096 and 7097 (totaling 390ha). The Tick Hill Gold Deposit was mined between 1991 and 1995 by Carpentaria Gold Pty Ltd (a subsidiary of MIM Holdings Limited) to produce 513,333 ounces of gold from 705,000 tonnes of ore at a recovered grade of 22.6 g/t gold (source: MIM – Annual Reports). This makes it one of the highest-grade gold deposits in Australia's recent gold producing history.

Pursuant to the 2004 Tick Hill Option and Sale Agreement with MIM, DRX exercised that option via an Implementation Deed resulting in the assignment to DRX of a 100% interest in the three ML's. Finalisation of transfers and tenement ownership in Diatreme's name was achieved in March 2015, and this assignment satisfied certain conditions precedent for the commencement of the DRX Farm-In and Joint Venture Agreement with Superior Resources Limited (ASX:SPQ) over the Tick Hill Gold Project. Under the Joint Venture Agreement, Superior Resources has the right to earn a 50% interest in the project by:

- Completing \$750,000 of exploration expenditure;
- Making a payment to DRX of \$100,000; and

• Lodging 50% of the Queensland Government security bond on the tenements.

However, exploration and assessment of the surface material within the leases (including alluvials, tailings and waste dumps) is to be conducted as a joint operation, with each party contributing 50% of the costs.

The initial exploration work program was focussed on an assessment of the tailings from the previous mining to determine if they contained sufficient gold to warrant detailed investigation of reprocessing options, with a particular emphasis on the short-term opportunity to facilitate positive revenue generation. The total reported production for the Tick Hill Gold Mine was 705,000t at 22.6 g/t Au for 15,900kg Au at 97% gold recovery. Some high grade open pit ore was mined and transported to the Carpentaria Gold operations at Ravenswood to provide early cash flow to the project, this has been estimated at 20,000t based on the reported 19,000oz produced at Ravenswood in the 1991/1992 financial year (with head grades for that year of 30.2 g/t Au). This information suggests that approximately 685,000t of tailings remain on site, with an estimated grade around 0.7 g/t Au.

#### **Tails Drilling**

A reconnaissance drilling program of the filled and capped tailings dam, decant pond and an area of alluvial potential (as defined by historical soil surveys) occurred in late July 2015 utilising the company's aircore drilling rig to allow a cost-efficient exploration program to be undertaken using inhouse equipment and expertise.

Encouraging results were returned from the tailings dam, with an overall average grade of 1.04 g/t Au. The eastern tailings paddock returned an average grade of 1.42 g/t Au from 78 samples, whilst the western tailings paddock which has been filled to a slightly higher elevation, returned 0.73 g/t Au from 91 samples.

An infill drilling program was undertaken over the Tailings Dam in September 2015 with holes drilled at 50m x 50m spacing with an equidistant offset from the reconnaissance drilling. The infill drill results show good correlation with the reconnaissance drilling results, with the combined weighted average grade for the eastern paddock calculated at 1.42 g/t Au (74.1m at 1.42 g/t Au from reconnaissance drilling and 81.2m at 1.43 g/t Au from infill drilling) and the combined weighted average grade for the western paddock calculated at 0.81 g/t Au (88.8m at 0.73 g/t Au from reconnaissance drilling and 107.1m at 0.88 g/t Au from infill drilling).

The tailings dam is calculated to have an average weighted grade of **1.08 g/t Au** based on the combination of reconnaissance and infill drilling (including a top cut of 4.0 g/t Au).

#### **Tails Metallurgical Study**

Bulk samples were collected during the infill drilling and a ~50kg composite sample from the central N-S line of drilling through each of the tailings paddocks was submitted for metallurgical testwork by ALS Metallurgy in Perth. As the presence of cyanide had been noted in previous environmental sampling of the tailings material, a 20kg sub-sample of the bulks was re-pulped with water for 24 hours and then pressure filtered. Analysis of the solids and solution returned assays showing gold distribution in solution of 11% for the eastern paddock, and 15% for western paddock.

By combining assays from the re-pulping work with earlier assays of the as-received bulk sample, a calculated head grade of 1.27 g/t Au for the eastern paddock and 0.71 g/t Au for the western paddock can be calculated. This correlates well with mass weighted average grades of the included drill samples of 1.33 g/t Au for the eastern paddock and 0.77 g/t Au for the western paddock.

Cyanidation leach testwork on the washed tailings residue was undertaken, with generally low gold extraction rates of 24% for the eastern paddock and 32% for the western paddock. The low extraction rate is considered consistent with 'as-received' tailings material, and sizing analysis and assay indicate that gold distribution is weighted towards the coarser fractions of the tailings material, with 70% of the gold contained in the +75µm fractions of both tailings paddocks. As the gold grade increases in the coarser size fractions this suggests that unrecovered gold in the tailings is likely to be directly related to grind size and degree of liberation.

An ultra-fine re-grind of the samples was then undertaken, with the eastern paddock returning 95% gold extraction from a 24-hour leach on a sample with a p80 of 14  $\mu$ m, and the western paddock returning 98% gold extraction from a 24-hour leach on a sample with a p80 of 11  $\mu$ m. For both samples, very high levels of gold extraction were achieved within 4 hours (89% and 94% respectively). A series of

grinding and leaching tests were then undertaken to develop a gold extraction vs grind size recovery curve, with a clear trend between grind size and gold extraction such that gold extraction increases at increasingly finer grind size. The target size would be a trade-off between costs (particularly grinding energy costs) and additional gold extraction.

The metallurgical work completed during 2015 indicates that very high levels of gold extraction can be achieved by cyanide leaching of re-ground tailings material, and this coupled with a significant proportion of water soluble gold provided encouragement for development of an efficient processing option for the Tick Hill tailings material.

Further studies were undertaken during Q2 of 2016 to help determine the optimal grain size required to balance leach extraction rates with energy requirements for regrinding of the tailings. The cyanide leach testwork showed that gold extraction increases with increasingly finer grind size, but gold extraction of ~90% or higher can be achieved at grind sizes of around  $P_{80}$  35  $\mu m$  and finer (based on previous testwork reported in October 2015). Gold extraction after 12 hours was consistently high at all grind sizes assessed (10 – 25  $\mu m$ ), and in most cases, increases between 12 and 24 hours. Ultra-fine grinding testwork utilizing an Isamill<sup>TM</sup> was conducted to determine the likely energy requirements. These results reported slightly higher than parameters used in the Scoping Study, but further work is required to generate data suitable for use in feasibility studies.

A 50kg sample was processed through a Knelson concentrator during Q3 of 2016 to assess the efficiency of gravity separation on the Tick Hill tailings material. Although a gravity concentrate with free gold was produced, the overall gold recovery to concentrate was too low for gravity separation to be considered as an alternate or complementary processing method.

Additional metallurgical testwork is required to allow detailed design of a process flowsheet, determination of capital and operating costs, and development of a financial model to further assess the economic potential for mining and processing of the tailings material.

#### **Tails Resource**

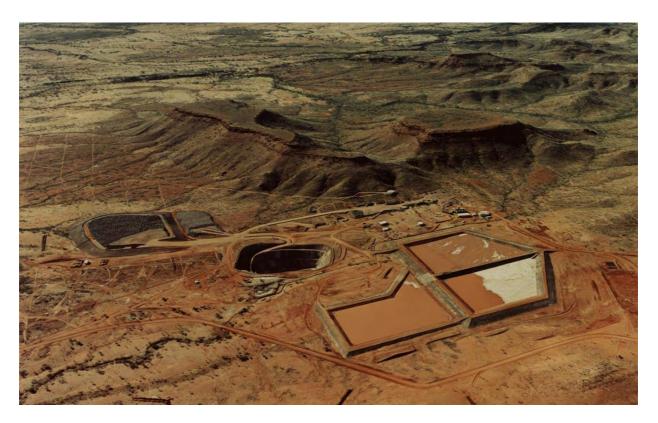
Diatreme announced a maiden mineral resource estimate for tailings material located within the rehabilitated tailings dam at the Tick Hill Gold Project in January 2016. The Indicated Resource is estimated at 630kt at 1.08 g/t Au (at 0.5 g/t Au cut-off) containing 680kg (22,000 troy ounces) of gold.

The resource estimate utilises data from Diatreme's 2015 drilling programs, together with documented design parameters for the Tailings Dam construction and a high-resolution DEM captured by Glencore in 2013 to estimate material volumes. The resource estimate concurs with previous calculations of the tailings material based on historical production and the exploration drilling results.

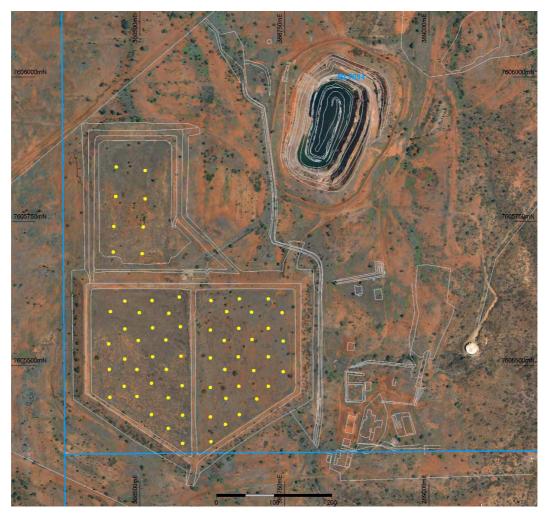
#### **Scoping Study**

A scoping study prepared by external consultants Metcor confirmed the potential for a standalone operation processing the tailings resource, via a 20-month operation processing the tailings using regrinding and a standard CIP/CIL circuit. Using conservative gold price and exchange rate assumptions together with stage appropriate capital and operating cost estimates, the study shows Tick Hill's potential to deliver a commercial return.

Further engineering and commercial studies, including grinding requirements, the pricing of major plant items required for processing operations, and detailed energy and labour costs will allow a feasibility report to be prepared.



Tick Hill Gold Mine (circa 1993) looking easterly



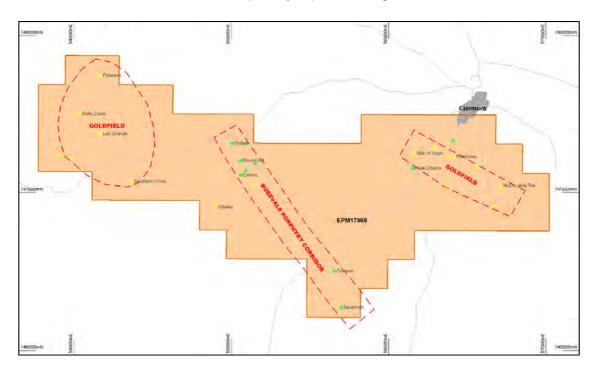
Tick Hill Project, tails drilling and previous site layout

#### CLERMONT COPPER/GOLD PROJECT - CENTRAL QUEENSLAND

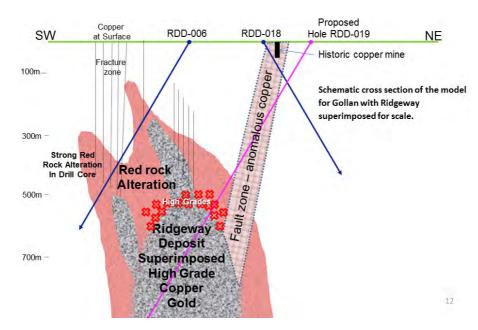
The Clermont Project is situated close to the town of Clermont in central Queensland. Diatreme is exploring the area for porphyry copper/gold targets and mesothermal gold targets. The project area covers numerous prospects including Rosevale Project and the historic Peak Downs Copper Mine.

At the Gollan Prospect, toward the north of the Rosevale Porphyry Corridor (RPC), the Company has defined, from previous drilling, a wide zone of hematite-bearing propylitic alteration of the intrusives, located in a zone of abundant secondary carbonate copper on surface. The geological setting is reminiscent of the high-grade Ridgeway deposit at Cadia NSW. Recent exploration has highlighted drill-ready porphyry copper targets for follow-up drilling.

No field exploration was undertaken during 2017, but further exploration is warranted over Clermont particularly over the RPC for copper and over the Palm Trees Prospect for gold. The tenement holding was reduced to EPM17968 which hosts the primary exploration targets.



#### **Location of Clermont tenement and prospects**



Schematic cross section of model for Gollan Prospect with Ridgeway superimposed for scale

#### **TENEMENT CONSOLIDATION**

In maintaining the company's focus on core projects, there were minor changes to the company's tenement holding during 2017.

**Grays Hill Project:** Following a strategic review of exploration potential, a decision was made to surrender EPM25117.

#### **COMPETENT PERSON STATEMENTS**

The information in this report, insofar as it relates to Exploration Results and Mineral Resources 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.

The information in this report that relates to Ore Reserves is based on information compiled by Mr Phil McMurtrie, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr McMurtrie is a director of Tisana Pty Ltd, and is a consultant to Diatreme Resources Limited. Mr McMurtrie 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 McMurtrie consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

### **Directors' Report**

The Directors present their report on Diatreme Resources Limited ("Diatreme" or "the Company") and its subsidiaries (the "Group") for the year ended 31 December 2017.

The following persons were directors of Diatreme Resources Limited during the whole year and up to the date of this report:

A Tsang
C Wang
Y Zhuang
G Starr (appointed on 12 October 2017)

#### PRINCIPAL ACTIVITIES

The principal activity of the Group during the course of the financial year was exploration for heavy mineral sands, copper and gold in Australia. There were no changes in the nature of the Group's principal activities during the year.

#### **DIVIDENDS**

No dividend has been paid since the end of the previous year and the Directors do not recommend the payment of any dividend for the year ended 31 December 2017.

#### **REVIEW OF OPERATIONS**

During the year, Diatreme Resources Limited (Diatreme) was primarily focussed on the advancement of its major projects following grant of key Government agency approvals for the Cyclone Zircon Project (Cyclone) and progressing towards undertaking further commercial and technical studies to allow continued progress on Cyclone, Tick Hill (Tick Hill Gold Project) and Cape Bedford (Cape Bedford Silica & HM Sands Project).

Concurrently with the major project development program, management continue to examine tenement areas currently held and where possible actively pursues opportunities to reduce holding costs through tenement consolidation, reduction or relinquishment to ensure only the most prospective areas are held by the company and operational overheads are minimised. Strict application of budgeting programs and strong fiscal controls also allows the company to keep fund raising activities to the minimum to maintain operational integrity and forward progress. Diatreme remains relentless in its pursuit of cost minimisation where it can without hampering operations.

Diatreme's flagship project the "Cyclone Zircon Project" has now transited during the course of the year through the last stage of a complex commercial, operational and permitting project de-risking process. This de-risking was identified by Diatreme following potential project participant's feedback during discussions and external project due diligence exercises, as key commercial/technical/permitting elements that needed to be actioned so that participation discussions could be advanced and finalised. In essence advancing Cyclone to now be a "turn-key" opportunity fully permitted ready for mine development.

The last stage of this complex process, obtaining the WA Minister for Environment's approval on environmental permitting required to allow the mine access road and all associated camp infrastructure to be established, was granted in early January 2017. This crucial permitting allows for construction of mine road access for transport of mine product and development of all associated mining infrastructure.

This key permitting advance in conjunction with the full project enhancement and update report on the Project that was undertaken by independent engineering services firm Sedgman Ltd, which confirmed the project's robust economics within the current day context and current commercial parameters (product pricing, wage/labour rates, fuel and power generation costs, etc.), gives Diatreme the impetus to finalise the remaining aspects of the Cyclone Project Definitive Feasibility Study (DFS) to ensure the establishment of a viable mining operation. This progress has allowed Diatreme to now engage in

discussions with potential product offtakers to ascertain market appetite for the eventual mining operations of Zircon and Titanium products.

In September 2017 Diatreme entered into a memorandum of understanding (MOU) with China ENFI Engineering Corporation (part of the Minmetals Group) exploring between the companies a broad commercial relationship to advance the Cyclone Project and defining the terms for the commencement of Definitive Feasibility Study (DFS) of sufficient standard for the company to make a final investment decision on the Cyclone Project.

Diatreme has also been very encouraged by preliminary exploration activity at the Cape Bedford exploration tenement where early grab samples taken at various points within the tenement indicate high purity silica of export quality with additional potential for contained heavy minerals. These results will be followed up by an extensive drilling program scheduled for the third quarter of 2017.

#### **Major Activities**

Key operational highlights, in chronological order during the period in review include:

#### Cyclone

- Final ministerial consent (approval) was received on 9 January 2017 from the WA Environment Minister allowing the Cyclone project to: "Develop and operate the Cyclone Mineral Sands Mine, including open cut pits, mining and processing infrastructure, airstrip, accommodation camp, bore fields and haul road construction from the mine site to the Forrest rail siding."
- In June 2017 Diatreme announced that advanced discussions are underway with potential Chinese offtake partners concerning the Company's Cyclone Zircon Project in the Eucla Basin.

#### Cape Bedford

- A Compensation and Conduct Agreement (CCA) with traditional land owners, the Hopevale Congress Aboriginal Corporation was negotiated, and executed on 18 January 2017, for the Cape Bedford Silica/Heavy Minerals Project (EPM17795).
- Preliminary metallurgical testwork on a 90kg sample of HM mineralised dune material immediately south of Elim Beach in EPM17795 reported highly encouraging processing characteristics and readily produced a range of saleable heavy minerals (HM) concentrates with acceptable grades and recoveries.

#### Corporate

• In October a new independent director, Mr Gregory Starr, was appointed to the Diatreme Board.

#### **Fundraising**

The final balance of \$300,000 on the convertible note facility was received during the first half of 2017. This has brought the convertible note facility total to \$3.0 million.

In July 2017, the company commenced a \$750,000 capital raising to sophisticated investors which was fully subscribed and closed off during early September to fund specific exploration programs and working capital. In November 2017, the company also raised \$365,000 through a Share Purchase Plan and \$180,000 from the exercise of unlisted options.

#### **Exploration**

Key Exploration operations during the year involved:

- Reporting of an updated global mineral resource estimate for the Cyclone Project of 203 million tonnes (Mt) at 2.3% HM at a 1% HM cut-off grade, containing 4.7Mt of HM.
- Six grab samples of silica sand were collected during a reconnaissance site visit to the dunefield at Cape Bedford. All samples were submitted for HM analysis with two samples returning 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 grab samples was

- then submitted for XRF analysis, and all reported ≥99.8% SiO2 with low levels of Fe2O3 (average 0.014%) and Al2O3 (average 0.043%).
- This preliminary work confirms the potential of the widespread silica sand dune material to generate high quality silica sand.
- Preliminary metallurgical testwork was completed on a 90kg sample of dune material (assaying 2.6% HM) immediately south of Elim Beach in EPM17795. The sample processed readily and initial work indicates the sands to be amenable to the use of standard mineral sands process methodologies and equipment.

Capital market conditions continue to remaining difficult for junior explorers and Diatreme is not immune from these general capital market conditions. However, during the first half of 2017 we started to see within the heavy minerals sector with particular reference to Zircon and Titanium products some very positive market signs in terms of consistent, sustainable product price increases.

We remain optimistic that these product price increases and the associated effect these deliver to our Cyclone Project economics along with improved capital market sentiment will give us the impetus needed to deliver the project.

#### **OPERATING RESULTS**

The net loss of the Group for the financial year ended 31 December 2017 was \$1,418,526 (2016: loss of \$1,850,962).

During the year the Group utilised its cash resources to undertake exploration and evaluation activities within its tenement portfolio, with 50% expenditure on Cape Bedford and 34% on Cyclone. The Group monitors cash flow requirements for operational, exploration and evaluation expenditure and will continue to use capital market issues to satisfy anticipated funding requirements.

#### SIGNIFICANT CHANGES IN STATE OF AFFAIRS

There were no significant changes in the state of affairs of the Group during the financial year not otherwise dealt with in this report.

#### **EVENTS SUBSEQUENT TO REPORTING DATE**

11 January 2018	Cooperation and Consulting Services agreements signed with China ENFI Engineering Corporation (ENFI) replacing previous Memorandum of Understanding (MOU), for completion of Cyclone Zircon Project's definitive feasibility study (DFS).
31 January 2018	Completion of private placement to sophisticated investors to raise a total of \$490,000.
7 February 2018	The Company made an announcement to ASX on the inadvertent breach of ASX Listing Rule 10.11. The Company had issued 25,000,000 shares and 25,000,000 unlisted options to a director and an entity associated with a director in September 2017 without prior shareholders' approval, resulting in an inadvertent breach of ASX Listing Rule 10.11. The Company has cancelled the options and will seek shareholder approval at an extra ordinary general meeting (EGM) on 5 April 2018 for the buy-back and cancellation of the shares at their issue price. At the EGM, the company will also seek shareholders' approval for the issue of the same number of shares and unlisted options to a director and the entity associated with a director.
28 February 2018	35,000,000 unlisted options granted on 21 September 2017 were fully

exercised and a total of \$420,000 was raised.

#### **FUTURE DEVELOPMENTS**

The Group intends to continue its exploration activities on its existing projects, and progress development of the Cyclone Project.

#### **INFORMATION ON DIRECTORS**

Name: Cheng (William) Wang
Title: Non-executive Chairman

Qualifications: MBA

Experience: Mr Wang was appointed Director in May 2011. For 15 years he

held senior management positions in several major Chinese state-owned companies, with most recent role being in charge of an international commodities trading arm with group assets exceeding \$1.5 billion. Having worked across most provinces in China and understanding Chinese politics and government systems, he has developed wide business connections within China. Now domiciled in Australia, he has over recent years been active with Australian companies including directorships with China Century Capital Limited, Jupiter Mines Limited, and Gulf Alumina Limited. Mr Wang was appointed Non-executive

Chairman on 1 July 2014.

Other current directorships: None Former directorships (last 3 years): None

Special responsibilities: Chair of audit committee, member of remuneration committee

Interests in shares: 4,067,255 ordinary shares (held indirectly)
Interests in options: 1,000,000 unlisted options (held directly)

Name: Andrew Tsang

Title: Non-executive Director

Qualifications: None

Experience: Mr Tsang is a naturalised Australian citizen who was born and

educated in China and who has successfully established and run construction, engineering and property development businesses, both in China and Australia, as well as establishing successful import agencies for Australian manufactured goods into China. He is a non-executive director of Mindax Limited and has sound commercial connections with many leading Chinese

heavy industry producers.

Other current directorships: Mindax Limited (since 28 March 2008)

Former directorships (last 3 years): None

Special responsibilities: Chair of remuneration committee

Interests in shares: 116,536,110 ordinary shares (38,895,600 shares held directly

and 77,640,510 shares held indirectly)

Interests in options: 6,000,000 unlisted options (1,000,000 options held directly and

5,000,000 options held indirectly)

Name: Yufeng (Daniel) Zhuang Title: Non-executive Director

Qualifications: BA (Bejing, China), MSc (New Jersey, USA)

Experience: Mr. Zhuang was nominated to the Board by the (former)

association of Chinese shareholders Messrs Zhensheng Zhuang, Chenfei Zhuang and Qi Lin, to represent their significant investment and ongoing corporate commitments toward the Company. He has worked for Ping An Securities in

Beijing and Fujian Minxing Group in Zhangzhou, China.

Other current directorships: None Former directorships (last 3 years): None

Special responsibilities: Member of audit committee

Interests in shares: 140,983,890 ordinary shares (held directly)

Interests in options: 20,000,000 options (held directly)

Name: Gregory Barry Starr
Title: Non-executive Director

Qualifications: BBus, CPA

Experience: Mr Starr was appointed Director in October 2017. He is a highly

experienced corporate leader in the resources sector, with over 25 years of executive management experience across a number of Australian and International companies. This includes roles as Managing Director of KBL Mining Limited (ASX), Managing Director of Crater Gold Mining Company Limited (ASX), President and Director of Kenai Resources Limited (TSX), Chief Executive Officer of Golden China Resources (TSX) and Managing Director of Emperor Mines

Limited.

Other current directorships: Birrabong Corporation Limited

Former directorships (last 3 years): KBL Mining Limited

Crater Gold Limited

Interests in shares: None Interests in options: None

#### **COMPANY SECRETARY**

Mr Tuan Do was appointed Company Secretary in May 2011 and is also the Group Financial Controller.

#### **MEETINGS OF DIRECTORS**

The number of meetings of the board of Directors held during the year ended 31 December 2017, and the number of meetings attended by each Director was:

Name	Board		Audit Committee		Remuneration Committee	
	Held	Attended	Held	Attended	Held	Attended
A Tsang	5	5	-	-	-	-
C Wang	5	5	2	2	-	-
Y Zhuang	5	4	2	2	-	-
G B Starr	-	-	-	-	-	-

#### **REMUNERATION REPORT - AUDITED**

The remuneration report is set out under the following main headings:

- A Principles used to determine the nature and amount of remuneration
- B Relationship of remuneration with Group performance
- C Details of remuneration
- D Employment contracts
- E Share-based compensation
- F Equity instruments held by key management personnel

#### A Principles used to determine the nature and amount of remuneration

The board seeks to set aggregate remuneration at a level which provides the Company with the ability to attract and retain directors of the highest calibre, whilst incurring a cost which is acceptable to shareholders.

#### (i) Non-executive Directors

Fees and payments to Non-executive Directors reflect the demands which are made on, and the responsibilities of, the Director. Non-executive Directors' fees and payments are reviewed annually by the Remuneration Committee.

Non-executive Directors' fees are determined within an aggregate Directors' fee pool limit, which is periodically recommended for approval by shareholders. The maximum currently stands at \$300,000 per annum plus statutory superannuation.

#### B Relationship of remuneration with Group performance

The Directors consider that, as the Group is in an exploration phase of its development, it is not appropriate that remuneration for employees and Directors be linked to the financial performance of the Group. Once the Group enters a sustained production phase, this assessment may change accordingly.

	Unit	2013	2014	2015 (restated)	2016 (restated)	2017
Share price at year	\$/share	0.02	0.01	0.01	0.01	0.02
end						
Market capitalisation	\$	12,191,649	7,264,157	8,097,490	8,767,327	15,916,953
Revenue	\$	263,729	267,799	153,374	62,944	13,814
Total assets	\$	22,102,096	15,237,360	13,545,426	14,060,241	14,441,405
Net loss after tax	\$	4,797,128	7,252,709	3,793,703	1,850,962	1,418,526

#### C Details of remuneration

The key management personnel of the Group include the Directors as per the "Directors" sections above and the following persons:

N J McIntyre - Chief Executive Officer

T Do - Group Financial Controller/Company Secretary

Details of the remuneration of the key management personnel of the Group are set out in the following tables. No performance based remuneration was paid or payable during the period.

2017	Short-term benefits	Post- employment benefits	Long- term benefits	Share- based payments	
Name	Cash salary & fees	Superannuation	Long service leave	Options	Total \$
Non-executive Directors	\$	\$	\$	\$	Ψ
A Tsang	32,000	3,040	-	-	35,040
C Wang	32,000	3,040	-	-	35,040
Y Zhuang	90,000	8,550	-	-	98,550
G B Starr #	6,926	658	-	-	7,584
Other key management personnel					
N J McIntyre	179,256	8,550	-	-	187,806
T Do	129,000	12,255	-	-	141,255
Total	469,182	36,093	-	-	505,275

<sup>#</sup> Appointed on 12 October 2017

2016	Short-term benefits	Post- employment benefits	Long- term benefits	Share-based payments	
	Cash salary, fees		Long service		Takal
Name	& leave \$	Superannuation \$	leave \$	Options \$	Total \$
Non-executive Directors	Ψ	Ψ	Ψ	Ψ	Ψ
A Tsang	32,000	3,040	-	-	35,040
C Wang	32,000	3,040	-	-	35,040
Y Zhuang	90,000	8,550	-	-	98,550
Other key management personnel	477.005				477.005
N J McIntyre	177,395	-	-	-	177,395
T Do	139,799	12,255	-	-	152,054
Total	471,194	26,885	-	_	498,079

The group also paid \$51,532 (2016: \$84,305) for specialist market and consultancy services from Fortune Corporation Australia Pty Limited, a director-related entity of William Wang.

#### D Employment contracts

The employment conditions of other key management personnel, including the Chief Executive Officer and Group Financial Controller/ Company Secretary are formalised in employment contracts. Employment contracts are not of a fixed term. Employment contracts specify a range of notice periods.

#### E Share-based compensation

Options provided as remuneration and shares issued on exercise of such options

No new options or performance rights were granted as compensation to Directors and other key management personnel during the 2016 and 2017 financial years. All options disclosed below have vested.

2017	Beginning balance	Granted as remuneration	Exercised during the year	Options lapsed	Balance at end of year
A Tsang	1,000,000	-	-	-	1,000,000
C Wang	1,000,000	-	-	-	1,000,000
Y Zhuang	-	-	-	-	-
N J McIntyre	1,000,000	-	-	-	1,000,000
T Do	1,000,000	-	-	-	1,000,000

#### F Equity instruments held by key management personnel

The following table detail the number of fully paid ordinary shares in the Company that were held during the financial year by key management personnel of the Group, including their close family members and entities related to them.

Shareholding

	Balance at the start of the year	Received as part of compensation	Additions	Disposals/ other	Balance at the end of the year
Ordinary shares					
A Tsang	111,536,110	_	5,000,000	-	116,536,110
C Wang	2,982,640	-	1,084,615	-	4,067,255
Y Zhuang	120,983,890	-	20,000,000	-	140,983,890
G B Starr	-	-	-	-	_
N J McIntyre	-	-	-	-	-
T Do	-	-	-	-	_
Total	235,502,640	-	26,084,615	-	261,587,255

#### Option holding

There were no listed options over ordinary shares in the company held during the financial year by any of the directors and other members of key management personnel of the Group, including their personally related parties.

Unlisted Option holding

	Balance at the start of the year	Received as part of compensation	Additions (as part of private placement)	Disposals/ other	Balance at the end of the year
A Tsang	1,000,000	-	5,000,000	-	6,000,000
C Wang	1,000,000	-	-	-	1,000,000
Y Zhuang	-	-	20,000,000	-	20,000,000
G B Starr	_	-	-	-	-
N J McIntyre	1,000,000	-	-	-	1,000,000
T Do	1,000,000	-	-	-	1,000,000
Total	4,000,000	-	25,000,000*	-	29,000,000

All unlisted options are vested and exercisable.

#### **END OF AUDITED REMUNERATION REPORT**

<sup>\*</sup> As a result of the inadvertent breach of ASX Listing Rule 10.11, 25,000,000 unlisted options were subsequently cancelled on 7 February 2018.

#### **SHARES UNDER OPTION**

Unissued ordinary shares of the Company under option as at 31 December 2017 are as follows:

			Number	
Issue/grant date	Expiry date	Exercise price	under option	Type
21 September 2017	28 February 2018	1.2 cents	60,000,000	Unlisted
31 May 2013	30 April 2019	10 cents	3,000,000	Unlisted
15 March 2013	30 April 2019	10 cents	5,000,000	Unlisted

No person entitled to exercise the options had or has any right by virtue of the option to participate in any share issue of the company or of any other body corporate. Of the 60,000,000 unlisted options granted on 21 September 2017, 35,000,000 were exercised subsequent to year end at the exercise price of 1.2 cents and 25,000,000 were cancelled on 7 February 2018.

#### **ENVIRONMENTAL REGULATION**

The Group is subject to environmental regulation in relation to its exploration activities. There are no matters that have arisen in relation to environmental issues up to the date of this report.

#### **INDEMNITY AND INSURANCE OF OFFICERS**

The company has indemnified the directors and executives of the company for costs incurred, in their capacity as a director or executive, for which they may be held personally liable, except where there is a lack of good faith.

During the financial year, the company paid a premium in respect of a contract to insure the directors and executives of the company against a liability to the extent permitted by the Corporations Act 2001. The contract of insurance prohibits disclosure of the nature of liability and the amount of the premium.

#### INDEMNITY AND INSURANCE OF AUDITOR

The company has not, during or since the end of the financial year, indemnified or agreed to indemnify the auditor of the company or any related entity against a liability incurred by the auditor.

During the financial year, the company has not paid a premium in respect of a contract to insure the auditor of the company or any related entity.

#### PROCEEDINGS ON BEHALF OF THE COMPANY

No person has applied to the Court under section 237 of the Corporations Act 2001 for leave to bring proceedings on behalf of the company, or to intervene in any proceedings to which the company is a party for the purpose of taking responsibility on behalf of the company for all or part of those proceedings.

#### **CHANGE OF AUDITOR**

During the second half of 2017, in order to better align with the Company's size and scale, the Company undertook a competitive tender process and the Board of Directors subsequently resolved to appoint William Buck (Qld) as auditor of the Company. BDO Audit Pty Ltd applied for, and received ASIC consent to resign as the auditor of the Company.

The decision to appoint William Buck (Qld) will be ratified by shareholders at the upcoming Annual General Meeting in 2018.

#### **NON-AUDIT SERVICES**

William Buck (Qld), the Company's current auditor, did not perform any other services in addition to their statutory audit duties.

#### **AUDITOR'S INDEPENDENCE DECLARATION**

A copy of the auditor's independence declaration as required under section 307C of the Corporations Act 2001 is set out on page 29.

#### **CORPORATE GOVERNANCE STATEMENT**

The Company's Corporate Governance Statement is available to view publically on the Company's website at <a href="https://www.diatreme.com.au">www.diatreme.com.au</a>.

This report is made in accordance with a resolution of directors, pursuant to section 298(2)(a) of the Corporations Act 2001.

On behalf of the directors

William Wang

Non-executive Chairman

29 March 2018 Brisbane



## AUDITOR'S INDEPENDENCE DECLARATION UNDER SECTION 307C OF THE CORPORATIONS ACT 2001 TO THE DIRECTORS OF DIATREME RESOURCES LIMITED

I declare that, to the best of my knowledge and belief, during the year ended 31 December 2017, there have been:

- no contraventions of the auditor independence requirements as set out in the *Corporations Act* 2001 in relation to the audit; and
- no contraventions of any applicable code of professional conduct in relation to the audit.

William Buck

William Buck (Qld) ABN 21 559 713 106

J A Latif

A Member of the Firm

Brisbane, 29 March 2018

CHARTERED ACCOUNTANTS & ADVISORS

Level 21, 307 Queen Street Brisbane QLD 4000 GPO Box 563 Brisbane QLD 4001 Telephone: +61 7 3229 5100 Williambuck.com

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## **Financial Report**

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME for the year ended 31 December 2017

	Note	2017 \$	2016 \$
Revenue	2 2	13,814	62,944
Other income	2	17,196	29,336
Employee benefit expenses		(752,974)	(697,202)
Depreciation expenses	10	(37,537)	(48,395)
Exploration assets written off	11	(11,321)	(258,003)
Other expenses	3	(405,756)	(688,803)
Finance costs		(241,948)	(250,839)
Loss before income tax		(1,418,526)	(1,850,962)
Income tax benefit	5	_	-
Net Loss for the year		(1,418,526)	(1,850,962)
Other comprehensive income Other comprehensive income for the year, net of tax		-	-
Total comprehensive loss for the year		(1,418,526)	(1,850,962)

		Cents	Cents
Loss per share			
Basic earnings per share	4	(0.2)	(0.2)
Diluted earnings per share	4	(0.2)	(0.2)

The above Consolidated Statement of Profit or Loss and Other Comprehensive Income should be read in conjunction with the accompanying notes.

Current Accets	Note	2017 \$	2016 # \$ (restated)	1 January 2016 # \$ (restated)
Current Assets Cash and cash equivalents	13	158,011	310,362	20,320
Trade and other receivables	7	120,813	110,511	63,142
Total Current Assets	•	278,824	420,873	83,462
Non-current Assets Available-for-sale financial assets Property, plant and equipment	10	- 130,369	3,252 172,316	3,252 231,262
Exploration and evaluation assets	11	13,988,080	13,417,168	13,114,514
Other assets	12	44,132	46,632	112,936
Total Non-current Assets		14,162,581	13,639,368	13,461,964
	•		.,,	-, - ,
Total Assets	ı	14,441,405	14,060,241	13,545,426
Current Liabilities Trade and other payables	8	353,568	296,056	361,702
Borrowings	14	1,752,959	-	-
Provisions	9	9,238	5,546	5,546
Total Current Liabilities		2,115,765	301,602	367,248
Non-current Liabilities				
Borrowings	14	-	1,373,825	485,592
Provisions	9	272,000	272,000	272,000
Total Non-current Liabilities		272,000	1,645,825	757,592
Total Liabilities		2,387,765	1,947,427	1,124,840
Net Assets		12,053,640	12,112,814	12,420,586
Equity				
Issued capital	16	49,979,066	48,750,812	48,048,903
Reserve	17	1,657,637	1,526,539	685,258
Accumulated losses	18	(39,583,063)	(38,164,537)	(36,313,575)
Total Equity	-	12,053,640	12,112,814	12,420,586

The above Consolidated Statement of Financial Position should be read in conjunction with the accompanying notes.

# Refer to Note 15

	Note Issued Share- capital based payment reserve \$ \$	Convertible note reserve	Accumulated losses	Total		
		\$		\$	\$	\$
Balance at 1 January 2016		48,048,903	191,938	79,235	(36,397,307)	11,922,769
Adjustment on correction of error			-	414,085	83,732	497,817
Balance at 1 January 2016 (restated)		48,048,903	191,938	493,320	(36,313,575)	12,420,586
Total comprehensive income: Loss for the year		-	-	-	(1,850,962)	(1,850,962)
Transactions with owners in their capacity as owners: Shares issued Share issue costs Convertible note draw		758,370 (56,461)	- -	- -	- -	758,370 (56,461)
down Balance at 31			-	841,281		841,281
December 2016 (restated)		48,750,812	191,938	1,334,601	(38,164,537)	12,112,814
Total comprehensive income: Loss for the year		-	-	-	(1,418,526)	(1,418,526)
Transactions with owners in their capacity as owners: Shares issued Share issue costs Convertible note draw		1,295,000 (66,746)	- -	- -	- -	1,295,000 (66,746)
down Balance at 31			-	131,098		131,098
December 2017	15 to 18	49,979,066	191,938	1,465,699	(39,583,063)	12,053,640

The above Consolidated Statement of Changes in Equity should be read in conjunction with the accompanying notes.

	Note	2017 \$	2016 \$
Cash flows from operating activities Receipts in the course of operations Payments to suppliers and employees Interest received Finance costs Net cash used in operating activities	6	13,464 (1,139,445) 313 (1,715) (1,127,383)	59,205 (1,394,522) 3,618 (2,749) (1,334,448)
Cash flows from investing activities Payments for property, plant and equipment Payments for exploration and evaluation assets Proceeds from sale of property, plant and equipment Payments for security deposits Refund of security deposits Net cash used in investing activities	-	(1,121) (527,328) 22,727 - 2,500 (503,222)	(6,861) (665,035) 18,173 (39,365) 105,669 (587,419)
Cash flows from financing activities Proceeds from issue of shares Payments for share issue costs Proceeds from drawdowns of borrowings Payments for borrowing costs Net cash from financing activities	- -	1,245,000 (66,746) 300,000 - 1,478,254	758,370 (56,461) 1,600,000 (90,000) 2,211,909
Net (decrease)/increase in cash and cash equivalents  Cash and cash equivalents at the beginning of the financial year		(152,351) 310,362	290,042 20,320
Cash and cash equivalents at the end of the financial year	13	158,011	310,362

The above Consolidated Statement of Cash Flows should be read in conjunction with the accompanying notes.

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#### A. CORPORATE INFORMATION

Diatreme Resources Limited (the "Company") is a public company listed on the Australian Securities Exchange (trading under the code DRX) and is incorporated and domiciled in Australia. The address of the Company's registered office and principal place of business is Unit 8, 55-61 Holdsworth Street, Coorparoo, Queensland 4151. The Group financial statements as at and for the year ended 31 December 2017 comprise the Company and its subsidiaries (together referred to as the "Group").

The principal activity of the Group during the course of the financial year was the exploration for heavy mineral sands, copper, gold and base metals in Australia.

## **B. BASIS OF PREPARATION**

## (a) Statement of compliance

The financial statements are general purpose financial statements which have been prepared in accordance with Australian Accounting Standards, other authoritative pronouncements of the Australian Accounting Standards Board and the *Corporations Act 2001*. The Group is a for-profit entity for financial reporting purposes under Australian Accounting Standards.

The consolidated financial statements of the Group also comply with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

The financial statements were approved by the Board of Directors on 29 March 2018.

#### (b) Basis of measurement

The Group financial statements have been prepared on the historical cost basis.

# (c) Functional and presentation currency

These Group financial statements are presented in Australian dollars, which is the Company's functional currency and the functional currency of the Group.

#### (d) Accounting policies

Accounting policies have been applied consistently by all of the Group's entities and to all periods presented in the consolidated financial statements. Specific significant accounting policies are described in the note to which they relate. The following accounting policy applies to the consolidated financial statements as a whole:

# Good and services tax (GST)

Revenues, expenses and assets are recognised net of the amount of associated GST, unless the GST incurred is not recoverable from the taxation authority. In this case it is recognised as part of the cost of acquisition of the asset or as part of the expense.

Receivables and payables are stated inclusive of the amount of GST receivable or payable. The net amount of GST recoverable from, or payable to, the taxation authority is included with other receivables or payables in the statement of financial position.

Cash flows are included in the statement of cash flows on a gross basis. The GST components of cash flows arising from investing or financing activities which are recoverable from, or payable to the taxation authority, are presented as operating cash flows.

### (e) Adoption of new and revised accounting standards

A number of new and revised standards became effective for the first time to annual periods beginning on or after 1 January 2017. Adoption of these new and revised standards did not have a material impact on the financial report.

## (f) Material Uncertainty Regarding Going Concern

The financial statements have been prepared on the going concern basis, which contemplates the continuity of normal business activity and the realisation of assets and the settlement of liabilities in the normal course of business.

The Group has incurred a net loss after tax for the year ended 31 December 2017 of \$1,418,526 and a net cash outflow from operations of \$1,127,383. At 31 December 2017, the Group's current liabilities exceeded its current assets by \$1,836,941.

During the year ended 31 December 2017, the Group drew down the final balance of \$300,000 from the convertible note facility, and also further raised \$1,295,000 from private placements, a share purchase plan, and exercise of unlisted options.

The Group's ability to continue as a going concern and pay its debts as and when they fall due, is dependent upon the successful future raising of necessary funding through equity (refer to Note 27 for details of a private placement completed and the exercise of unlisted options post year-end), extension of the maturity date of the convertible note facility and accrued interest which the directors believe is likely, successful exploration and subsequent exploitation of the Group's tenements, securing product offtake agreements for the Cyclone Project, and/or sale of non-core assets.

The Directors have reviewed the business outlook and cash flow forecasts and are of the opinion that the use of the going concern basis of accounting is appropriate as they believe the Group will achieve the matters set out above. As such, the Directors believe that they will continue to be successful in securing additional capital through debt or equity issues as and when the need to raise working capital arises.

The reliance on securing additional capital through debt or equity gives rise to the existence of a material uncertainty that may cast significant doubt on the Group's ability to continue as a going concern and therefore whether it will be able to realise its assets and extinguish its liabilities in the ordinary course of business.

The Directors believe that they will continue to be successful in securing additional funds through the issue of securities as and when required. Accordingly, the financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts, nor to the amounts and classification of liabilities that may be necessary should the Group be unable to continue as a going concern.

# (g) Critical accounting estimates and judgements

The preparation of the consolidated financial statements requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates. Estimates are reviewed on an ongoing basis and any revisions to estimates are recognised prospectively.

Key judgements, estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amount of assets and liabilities within the next financial year are described in the following notes:

- 9. Rehabilitation provision
- 11. Exploration and evaluation assets

# C. RESULTS

This section sets out the results and performance of the Group.

## 1. Operating segments

The Group currently operates in one business segment and one geographical segment, namely explorer for heavy mineral sands, copper, gold and base metals in Australia. The revenues and results of this segment are those of the Group as a whole and are set out in the Consolidated Statement Profit or Loss and Other Comprehensive Income.

#### 2. Revenue and other income

Revenue is recognised at the fair value of the consideration received or receivable, and recognised when the service is provided, or ownership of the product has passed to the customer. Interest revenue is recognised on a time proportion basis using the effective interest method.

	2017 \$000	2016 \$000
a) Revenue		
Interest	313	3,618
Other	13,501	59,326
	13,814	62,944
b) Other income		
Gain disposal of non-current assets	17,196	761
Gain on loan	· -	28,575
	17,196	29,336
3. Other expenses		
Professional fees	49,887	124,117
Rental expenses on operating leases (#)	65,008	245,731
Listing and share registry expenses	49,237	56,948
Administration costs	238,372	262,007
Impairment of available-for-sale financial asset	3,252	· -
	405,756	688,803

(#) Operating leases are leases where the lessor retains substantially all the risks and rewards of ownership of the asset are classified as operating leases. Payments made under operating leases (net of incentives received from the lessor) are charged to the profit or loss on a straight-line basis over the period of the lease.

# 4. Earnings per share

#### Basic earnings per share

Basic earnings per share is calculated by dividing the profit or loss attributable to equity holders of the Company, excluding any costs of servicing equity other than ordinary shares, by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the year.

#### Diluted earnings per share

Diluted earnings per share adjusts the figures used in the determination of basic earnings per share to take into account the after income tax effect of interest and other financing costs associated with dilutive potential ordinary shares and the weighted average number of shares assumed to have been issued for no consideration in relation to dilutive potential ordinary shares.

	2017 \$	2016 \$
Loss after income tax attributable to the owners of Diatreme Resources Limited	(1,418,526)	(1,850,962)
Weighted average number of ordinary shares used in	Number	Number
calculating basic earnings per share	903,627,303	842,281,273
Weighted average number of ordinary shares used in calculating diluted earnings per share	903,627,303	842,281,273
	Cents	Cents
Basic earnings per share Diluted earnings per share	(0.2) (0.2)	(0.2) (0.2)

Options are considered to be potential ordinary shares but were anti-dilutive in nature and therefore the diluted loss per share is the same as the basic loss per share.

#### 5. Taxation

The income tax expense or revenue for the year is the tax payable on the taxable income based upon the national income tax rate for each jurisdiction adjusted by changes in deferred tax assets and liabilities attributable to temporary differences between the tax bases of assets and liabilities and their carrying amounts in the financial statements, and to unused tax losses.

Deferred tax assets and liabilities are recognised for temporary differences at the tax rates expected to apply when the assets are recovered or liabilities are settled, based on those tax rates which are enacted or substantively enacted for each jurisdiction. The relevant tax rates are applied to the cumulative amounts of deductible and taxable temporary differences to measure the deferred tax asset or liability. An exception is made for certain temporary differences arising from the initial recognition of an asset or a liability. No deferred tax asset or liability is recognised in relation to these temporary differences if they arose in a transaction, other than a business combination, that at the time of the transaction did not affect either accounting profit or taxable profit or loss.

Deferred tax assets are recognised for deductible temporary differences and unused tax losses only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Current and deferred tax balances attributable to amounts recognised directly in other comprehensive income are also recognised directly in other comprehensive income.

#### Tax consolidation legislation

The Company and its wholly-owned Australian subsidiaries have implemented the tax consolidation legislation.

Where applicable, each entity in the Group recognises its own current and deferred tax assets and liabilities. Amounts resulting from unused tax losses and tax credits are then immediately assumed by the parent entity. The current tax liability of each subsidiary entity is then also assumed by the parent entity.

The entities have also entered into a tax sharing and funding arrangement. Under the terms of this agreement, the wholly-owned entities reimburse the Company for any current income tax payable by the Company arising in respect of their activities. The reimbursements are payable at the same time as the associated income tax liability falls due.

In the opinion of the Directors, the tax sharing agreement is also a valid agreement under the tax consolidation legislation and limits the joint and several liability of the wholly-owned entities in the case of a default by the Company.

(a) The prima facie tax on accounting loss differs from the income tax provided in the financial statements. The difference is reconciled as follows:	2017 \$	2016 \$
Loss before income tax	(1,418,526)	(1,850,962)
Prima facie income tax benefit at 27.5% (2016: 28.5%) Tax effect of amounts which are not deductible in calculating taxable income:	(390,095)	(527,524)
Other	23,200	
Deferred tax assets not recognised Total income tax benefit	(366,895) 366,895	(527,524) 527,524
(b) Unrecognised deferred tax assets	-	
Unused tax losses	48,958,400	47,557,561
Potential tax effect at 27.5% (2016: 28.5%)	13,463,560	13,553,905

The Group has not recognised the deferred tax assets in the financial statements as it is not considered probable that sufficient taxable amounts will be available in future periods with which to be offset.

# 6. Reconciliation on net profit/(loss) to net cash flows used in operating activities

	2017 \$	2016 \$
Loss for the year	(1,418,526)	(1,850,962)
Non-cash items		
Depreciation	37,537	48,395
Capitalised exploration expenditure written-off	11,321	258,003
Impairment of available-for-sale financial asset	3,252	-
Gain on Ioan	-	(28,575)
(Profit)/loss on sale of fixed assets	(17,196)	(761)
Movements in operating assets and liabilities		
(Increase)/decrease in receivables	12,851	6,384
Increase / (decrease) in payables	239,686	233,068
Increase / (decrease) in provisions	3,692	-
Net cash used In operating activities	(1,127,383)	(1,334,448)

#### D. WORKING CAPITAL AND OTHER ASSETS AND LIABILITIES

This section sets out information relating to the working capital and other assets and liabilities of the Group. Working capital includes the assets and liabilities that are used in the day-to-day trading operations of the Group.

#### 7. Trade and other receivables

Trade and other receivables are recognised at nominal amount less an allowance for uncollectible amounts and have repayment terms between 30 and 90 days. Collectability of receivables is assessed on an ongoing basis. Debts which are known to be uncollectible are written off. An allowance is made for doubtful debts where there is objective evidence that the Group will not be able to collect all amounts due according to the original terms. Objective evidence of impairment includes financial difficulties of the debtor, default payments or debts more than 120 days overdue. On confirmation that the receivable will not be collectible the gross carrying value of the asset is written off against the associated provision.

	2017	2016
	\$	\$
Trade receivables (1)	68,274	95,079
Other receivables (1)	52,539	15,432
	120,813	110,511

<sup>(1)</sup> Receivables do not contain impaired assets and are not past due.

# 8. Trade, other payables and employee benefits

Trade and other payables

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

Employee benefits - Wages and Salaries and Annual Leave

Liabilities for wages and salaries, including non-monetary benefits and annual leave expected to be settled within 12 months of the end of the reporting period are recognised in other liabilities in respect of employees' services rendered up to the end of the reporting period and are measured at amounts expected to be paid when the liabilities are settled.

	2017	2016
	\$	\$
Unsecured		
Trade payables	32,822	18,862
Other payables and accruals	254,004	224,321
Employee benefits	66,742	46,873
	353,568	290,056

# 9. Provisions

Employee benefits - Long Service Leave

Liabilities for long service leave are recognised as part of the provision for employee benefits and measured as the present value of expected future payments to be made in respect of services provided by employees to the end of the reporting period. Consideration is given to expected future salaries and wages levels, experience of employee departures and periods of service. Expected future payments are discounted using corporate bond rates at the end of the reporting period with terms to maturity and currency that match, as closely as possible, the estimated future cash outflows.

#### Rehabilitation provision

A provision for rehabilitation is recognised when there is a present obligation to rehabilitate an area disturbed, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. An asset is created as part of the exploration and evaluation assets which is offset by a provision for rehabilitation.

The Group's exploration activities are subject to various laws and regulations governing the protection of the environment. The Group recognises management's best estimate for assets retirement obligations and site rehabilitations in the period in which they are incurred. Actual costs incurred in the future periods could differ materially from the estimates. Additionally, future changes to environmental laws and regulations, life of mine estimates and discount rates could affect the carrying amount of this provision.

	2017 \$	2016 \$
Current liabilities Employee benefits	9,238	5,546
Non-current liabilities Rehabilitation	272,000	272,000

#### **E. TANGIBLE ASSETS**

This section sets out the non-current tangible assets of the Group and the method used to assess the recoverable amount of these assets

#### Impairment of assets

At the end of each reporting period the Group assesses whether there is any indication that individual assets are impaired. Where impairment indicators exist, recoverable amount is determined and impairment losses are recognised in profit or loss where the asset's carrying value exceeds its recoverable amount. Recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purpose of assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash inflows that are largely independent of the cash inflows from other assets or groups of assets (cash-generating units).

Where it is not possible to estimate recoverable amount for an individual asset, recoverable amount is determined for the cash-generating unit to which the asset belongs.

The carrying values of capitalised exploration and evaluation expenditure and property, plant and equipment are assessed for impairment when indicators of such impairment exist. External factors, such as changes in expected future processes, technology and economic conditions, are also monitored to assess for indicators of impairment.

#### 10. Property, plant and equipment

Property, plant and equipment is stated at historical cost, including costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management, less depreciation and any impairments.

Depreciation is calculated on a diminishing value basis. Estimates of remaining useful lives are made on a regular basis for all assets.

The depreciation rates used for each class of assets are as follows:

Furniture and fittings 20%

Motor vehicles 20%

Plant and equipment 20-40%

4 - -	\$ 43,848 - (17,412)	\$ 181,310 6,861	\$ 231,262 6,861 (17,412)
-	(17,412)	•	6,861
-	(17,412)	•	6,861
- -		6,861 -	- ,
-		· -	(17 412)
41			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
4)	(6,751)	(40,350)	(48,395)
0	19,685	147,821	172,316
3	139,776	1,063,130	1,337,629
3)	(120,091)	(915,309)	(1,165,313)
0	19,685	147,821	172,316
	3 3) 0	3 139,776 3) (120,091)	3 139,776 1,063,130 3) (120,091) (915,309)

	Furniture and fittings	Motor vehicles	Plant and Equipment	Total
	\$	\$	\$	\$
Year ended 31 December 2017				
Opening net book amount	4,810	19,685	147,821	172,316
Additions	_	-	1,121	1,121
Disposals	-	(5,531)	-	(5,531)
Depreciation charge	(962)	(3,325)	(33,250)	(37,537)
Closing net book amount	3,848	10,829	115,692	130,369
At 31 December 2017				
Cost	134,723	99,172	1,064,251	1,298,146
Accumulated depreciation	(130,875)	(88,343)	(948,559)	(1,167,777)
Net book amount	3,848	10,829	115,692	130,369

# 11. Exploration and evaluation assets

Exploration and evaluation costs, including the costs of acquiring licences, are capitalised as exploration and evaluation assets on an area of interest basis. Costs incurred before the Group has obtained the legal rights to explore an area are recognised in the profit or loss.

Exploration and evaluation assets are only recognised if the rights to the tenure of the area of interest are current and either:

- the expenditures are expected to be recouped through successful development and exploitation of the area of interest or alternatively, by its sale; or
- activities in the area of interest have not, at the reporting date, reached a stage which permits a
  reasonable assessment of the existence or otherwise of economically recoverable reserves and active
  and significant operations in, or in relation to, the area of interest are continuing.

	2017 \$	2016 \$
Exploration and evaluation assets – at cost less impairment	13,988,080	13,417,168
Opening balance Costs capitalised during the year	13,417,168 582,233	13,114,514 560.657
Costs written off during the year (#)	(11,321)	(258,003)
Closing balance	13,988,080	13,417,168

(#) During the years ended 31 December 2016 and 31 December 2017, reviews of exploration data in conjunction with management assessment, resulted in these write-off of exploration assets.

Exploration and evaluation costs have been capitalised on the basis that the Group will commence commercial production in the future, from which time the costs will be amortised in proportion to the depletion of the mineral resources. Key judgements are applied in considering costs to be capitalised which includes determining expenditures directly related to these activities and allocating overheads between those that are expensed and capitalised. In addition, costs are only capitalised that are expected to be recovered either through successful development or sale of the relevant mining interest. Factors that could impact the future commercial production at the mine include the level of reserves and resources, future technology changes, which could impact the cost of mining, future legal changes and changes in commodity prices. To the extent that capitalised costs are determined not to be recoverable in the future, they will be written off in the period in which this determination is made.

At balance date the carrying amount of exploration and evaluation assets was \$13,988,080 of which \$11,162,276 is attributable to the significant exploration of the Group's Cyclone Zircon Project.

#### Farm-out Arrangement

On 20 March 2015, the Department of Natural Resources and Mines approved the transfer of the three mining leases comprising the Tick Hill Project (MLs 7094, 7096 and 7097) from Mount Isa Mines Limited (MIM) to the Company.

This event satisfied the final milestone under the Tick Hill Gold Project "Exploration Farm-in and Joint Venture Agreement", dated 17 June 2013 (JVA), between Diatreme Resources Limited and Superior Resources Limited (SPQ).

In addition, on 30 January 2015, SPQ and the Company confirmed that the remaining conditions of the JVA had been waived and as a result, SPQ rights and obligations in relation to the Tick Hill Gold Project commenced from that date.

Under the JVA, SPQ has the right to earn a 50% interest in the project by:

- spending a minimum of \$750,000 on exploration;
- making a payment to the Company of \$100,000; and
- lodging 50% of the Queensland Government security bond on the tenements.

All costs incurred by the Company for the Tick Hill Gold Project are recognised as exploration and evaluation assets. Reimbursement from SPQ is offset against the exploration and evaluation assets. At 31 December 2017, SPQ has not earned any interest in the project.

#### 12. Other non-current assets

	2017	2016
	\$	\$
Rent guarantee deposit	13,365	13,365
Security deposits	30,767	33,267
	44,132	46,632

#### F. CAPITAL STRUCTURE AND FINANCIAL RISKS

This section sets out the capital structure of the Group and its exposure to financial risks. The capital structure consists of debt and equity. This section also sets out the financial risks to which the Group is exposed as a result of its operating, investing and financing activities.

## 13. Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, on-demand deposits and short-term highly liquid investments that are readily convertible to known amounts of cash and are subject to insignificant changes in value.

	2017	2016
	\$	\$
Cash at bank and in hand	158,011	310,362

### 14. Borrowings

Loans and borrowings are initially recognised at the fair value of the consideration received, net of transaction costs. They are subsequently measured at amortised cost using the effective interest method. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in profit or loss over the period of the loans and borrowings using the effective interest method.

The component of the convertible notes that exhibits characteristics of a liability is recognised as a liability in the statement of financial position, net of transaction costs.

On the issue of the convertible notes the fair value of the liability component is determined using a market rate for an equivalent non-convertible bond and this amount is carried as a liability on the amortised cost basis until extinguished on conversion or redemption. The increase in the liability due to the passage of time is recognised as a finance cost. The remainder of the proceeds are allocated to the conversion option that is recognised and included in shareholders equity as a convertible note reserve, net of transaction costs. The carrying amount of the conversion option is not remeasured in subsequent years. The corresponding interest on convertible notes is expensed to profit or loss.

All borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the end of the reporting period.

During the year ended 31 December 2015, as part of the capital raising exercise, the Company entered into a funding agreement with a private investor for the provision of a \$3 million facility.

The facility terms are as follows:

- Six \$500,000 tranches drawn quarterly over a 15 month period, starting from receipt of the deposit (1st tranche) to comprise a fully drawn facility of \$3 million.
- Interest rate 5.20% pa.
- Term 36 months from first note drawdown date.
- Repayment:
  - o 50% of notes (\$1.5 million) convertible to ordinary shares at maturity at fixed price of \$0.02.
  - o 50% of notes (\$1.5 million) in cash by the Company at maturity.

As at 31 December 2016, the Company had drawn down \$2,700,000. During the year ended 31 December 2017, the final balance of \$300,000 was drawn down. Total borrowings are as follows:

	2017 \$	2016 \$ (restated)
Unsecured		
Loan	1,752,959	1,373,825
Total borrowings	1,752,959	1,373,825
Current liability Non-current liability	1,752,959 - 1,752,959	1,373,825 1,373,825

Accounting standards require the separate recognition of the debt and equity components of the convertible note facility. At the date of recognition of the convertible note, the debt and equity components of the facility were separated according to their fair values. The convertible notes are presented in the statement of financial position as follows:

	2017 \$	2016 \$ (restated)
Borrowings	1,752,959	1,373,825
Convertible note reserve	1,465,699	1,334,601
	3,218,658	2,708,426

Refer to Note 15 for further information on the restatement.

# 15. Correction of Error in Accounting for the Convertible Note Facility

During the year ended 31 December 2017, the accounting treatment of the convertible note facility was reviewed and it was determined that the accounting treatment applied in prior periods was incorrect.

As a consequence, financial liabilities were overstated and equity reserves were understated in the previously issued financial statements for the years ended 31 December 2015 and 31 December 2016.

The error as described has been corrected by restating each of the affected consolidated statement of financial position line items for the 31 December 2016 year as follows:

	31 Dec 2016 (original) \$	Increase / (Decrease)	31 Dec 2016 (restated) \$
Non-current liabilities - borrowings	2,623,466	(1,249,641)	1,373,825
Net Assets	10,863,173	1,249,641	12,112,814
Convertible note reserve	168,692	1,165,909	1,334,601
Accumulated losses	(38,248,269)	83,732	(38,164,537)

The restatement did not have a material impact on the comparative consolidated statement of profit or loss and other comprehensive income and did not impact earnings per share.

## 16. Issued Capital

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

	2017	2016
	\$	\$
994,809,591 (Dec 2016 876,732,679) ordinary shares	49,979,066	48,750,812

# (a) Movements in ordinary share capital

Date	Details	Number of shares	Issue price \$	\$
1 Jan 2016	Opening balance	809,749,043		48,048,903
Mar	Exercise of listed options.	218,516	0.020	4,370
Jul <sup>(1)</sup>	Shares issued	19,583,333	0.012	235,000
Jul <sup>(2)</sup>	Shares issued	47,181,787	0.011	519,000
	Shares issue costs	-		(56,461)
31 Dec 2016	Balance	876,732,679	_	48,750,812
Sep <sup>(1)</sup>	Shares issued (4)	75,000,000	0.010	750,000
Nov <sup>(2)</sup>	Shares issued	28,076,912	0.013	365,000
Nov <sup>(3)</sup>	Exercise of unlisted options.	15,000,000	0.012	180,000
	Shares issue costs		_	(66,746)
31 Dec 2017	Balance	994,809,591	_	49,979,066

#### Ordinary shares

Ordinary shares entitle the holder to participate in dividends and the proceeds on the winding up of the company in proportion to the number of and amounts paid on the shares held. The fully paid ordinary shares have no par value and the company does not have a limited amount of authorised capital.

On a show of hands every member present at a meeting in person or by proxy shall have one vote and upon a poll each share shall have one vote.

# (b) Share Options

		Number at e	nu oi yeai	
Expiry date	Exercise Price	2017	2016	
28 February 2018 (unlisted) (1)	\$0.012	60,000,000	-	
30 April 2019 (unlisted)	\$0.100	8,000,000	8,000,000	

(1) 75,000,000 options attached to the 75,000,000 shares from the September 2017 Placement, of which 15,000,000 options were exercised in November 2017 (refer also to Note 16 (a) above). 25,000,000 options were issued to a director and an entity associated with a director in September 2017 without prior shareholders' approval. These unlisted options were subsequently cancelled on 7 February 2018 and will be reissued once shareholder approval is received (refer Note 27).

Share options issued by the Company carry no rights to dividends and no voting rights. All options are exercisable for cash on a 1:1 basis.

	Number at e	Number at end of year		
Movement in share options	2017	2016		
Opening balance	8,000,000	8,000,000		
Issued 21 September 2017	75,000,000	-		
Exercised	_(15,000,000)			
Balance	68,000,000	8,000,000		

# 17. Reserves

	Share based payment reserve \$	Convertible note reserve \$	Total \$
Balance 31 December 2015 (restated)	191,938	493,320	685,258
Equity component of convertible note drawdowns (restated)		841,281	841,281
Balance 31 December 2016 (restated)	191,938	1,334,601	1,526,539
Equity component of convertible note drawdowns	-	131,098	131,098
Balance 31 December 2017	191,938	1,465,699	1,657,637

Nature and purpose of share-based payment – option reserve

The share-based payment reserve is used to recognise the fair value of options issued under the employee share option plan.

Nature and purpose of convertible note reserve

The convertible note reserve is used to recognise the fair value of the equity component of the convertible loan facility as described in Note 14 above.

Number at and of year

<sup>&</sup>lt;sup>(1)</sup> During both the 2016 and 2017 financial years the Company completed several placements to sophisticated and professional investors.

<sup>(2)</sup> The Company completed Share Purchase Plans in July 2016 and November 2017.

<sup>(3)</sup> Options attached to the share placement completed in September 2017.

<sup>(4) 25,000,000</sup> shares were issued to a director and an entity associated with a director in September 2017 without prior shareholders' approval. As disclosed in Note 27, the shares will be bought back, cancelled and reissued at an EGM to be held on 5 April 2018. The unlisted options attached to these shares were subsequently cancelled on 7 February 2018 (refer to Note 16(b) below and Note 27).

18. Accumulated losses	2017 \$	2016 \$ (restated)
Accumulated losses at the beginning of the year	(38,164,537)	(36,313,575)
Net loss for the year	(1,418,526)	(1,850,962)
Accumulated losses at the end of the year	(39,583,063)	(38,164,537)

#### 19. Financial instruments

The Group's principal financial instruments comprise cash, short-term deposits, trade payables and borrowings. The main purpose of these financial instruments is to fund the Group's operations.

The Group does not use any form of derivatives as it is not at a level of exposure that requires the use of derivatives to hedge its exposure. Exposure limits are reviewed by management on a continuous basis. The Group does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes.

# (a) Categories of financial instruments

	2017 \$	2016 \$ (restated)
Financial assets		
Cash and cash equivalents	158,011	310,362
Trade and other receivables	120,813	110,511
Security and other deposits	44,132	46,632
Available-for-sale financial assets	-	3,252
Total financial assets	322,956	470,757
	2017 \$	2016 \$ (restated)
Financial liabilities		(100000)
Trade and other payables	353,568	296,056
Borrowings	1,752,959	1,373,825
Total financial liabilities	2,106,527	1,669,881

The Board of Directors has overall responsibility for the establishment and oversight of the risk management framework which is summarised below:

## (b) Capital risk management

The Board's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. As an emerging explorer, the Group does not establish a return on capital. Capital management requires the maintenance of strong cash balance to support ongoing exploration. There were no changes in the Group's approach to capital management during the year. The Group is not subject to externally imposed capital requirements.

### (c) Market risk

#### Interest rate risk

Exposure to interest rate risk arises on financial assets and financial liabilities recognised at the end of reporting period whereby a future change in interest rates will affect future cash flows or the fair value of fixed rate financial instruments. The Group is also exposed to earning volatility on floating rate instruments. The Group does not have a formal policy in place to mitigate interest rate risks as the Group's income and operating cash flows are not materially exposed to changes in market interest rates.

At balance date, the Group had the following financial assets which are interest bearing:

	2017	2016	
	\$	\$	
Cash and cash equivalents (variable interest rates)	158,011	310,362	

#### (d) Credit risk

Credit risk is the risk that a counter party will not complete its obligation under a financial instrument that will result in a financial loss to the Group. The carrying amount of financial assets represents the maximum credit exposure.

The Group manages any credit risk associated with its funds on deposit by ensuring that it only invests its funds with reputable financial institutions.

The Group manages any credit risk associated with its trade and other receivables by regular monitoring of exposures against the credit limits and monitoring of the financial stability of significant customers and counterparties.

# (e) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due.

The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group manages liquidity risk by maintaining adequate cash reserves from funds raised in the market and by continuously monitoring forecast and actual cash flows.

The following are the contractual maturities of financial liabilities:

Consolidated	Carrying amount \$	Contractual cash flow \$	< 6 months \$	6-12 months \$	1-3 years \$	> 3 years \$
<b>31 Dec 2016</b> Trade and other						
payables	290,056	290,056	290,056	-	_	-
Borrowings	1,373,825	1,474,408	-	_	1,474,408	-
_	1,663,881	1,764,465	290,056	-	1,474,408	_

Carrying amount \$	Contractual cash flow	< 6 months \$	6-12 months \$	1-3 years \$	> 3 years \$
353,568	353,568	353,568	-	-	-
1,752,959	1,792,167	-	1,792,167	-	-
2,106,527	2,145,735	353,568	1,792,167	-	-
	353,568 1,752,959	amount cash flow \$  353,568 353,568 1,752,959 1,792,167	amount cash flow months \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	amount cash flow months months \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	amount cash flow months months 1-3 years \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

# (f) Fair values

The carrying amount of financial assets and financial liabilities recorded in the financial statements approximate their respective fair values, other than as noted below.

The fair value of the non-current asset comprising available-for-sale financial assets has been valued at cost less allowance for impairment.

#### **G. GROUP STRUCTURE**

This section sets out the legal structure of the Group.

#### 20. Interests in subsidiaries

The Group financial statements consolidate those of the Company and all of its subsidiaries as of 31 December 2017. Subsidiaries are all those entities over which the Group has the power to govern the financial and operating policies so as to obtain benefits from their activities. The existence and effect of potential voting rights that are currently exercisable or convertible are considered when assessing whether a Group controls another entity. The financial statements of the subsidiaries are prepared for the same reporting period as the parent company, using consistent accounting policies.

All transactions and balances between Group companies are eliminated on consolidation, including unrealised gains and losses on transactions between Group companies. Where unrealised losses on intragroup asset sales are reversed on consolidation, the underlying asset is also tested for impairment from a group perspective. Amounts reported in the financial statements of subsidiaries have been adjusted where necessary to ensure consistency with the accounting policies adopted by the Group.

Profit or loss and other comprehensive income of subsidiaries acquired or disposed of during the year are recognised from the effective date of acquisition, or up to the effective date of disposal, as applicable.

Set out below are details of the subsidiaries held directly by the Group:

Name of subsidiary	Country of Incorporation	Principal activity	Owner Inter 2017	•
Regional Exploration Management Pty Ltd	Australia	Logistical support	100%	100%
Chalcophile Resources Pty Ltd * Lost Sands Pty Ltd	Australia Australia	Metals exploration Mineral sands exploration	100% 100%	100% 100%

<sup>\*</sup> This entity is 100% owned by Regional Exploration Management Pty Ltd.

# 21. Parent Entity Information

·	2017 \$	2016 \$ (Restated)
Financial position		(Nostatou)
Current assets	273,555	414,901
Non-current assets	16,414,929	15,896,529
Total assets	16,688,484	16,311,430
Current liabilities	1,910,362	114,103
Non-current liabilities	272,000	1,645,825
Total liabilities	2,182,362	1,759,928
Net assets	14,506,122	14,551,502
Shareholders' equity		
Contributed equity	49,979,066	48,750,812
Reserves	1,657,637	1,526,539
Accumulated losses	(37,130,581)	(35,725,849)
Total equity	14,506,122	14,551,502
Loss for the year	(1,404,733)	(1,850,962)
Total comprehensive loss for the year	(1,404,733)	(1,850,962)

#### **Non-Current Assets**

Non-current assets include \$11,693,832 (2016: \$19,491,170) of intercompany receivables balances with recoverability of the debt based on successful exploitation of various tenement sites.

#### **Contingent Liabilities**

The parent entity does not have any contingent liability.

#### **Contractual commitments**

The parent entity does not have any contractual commitments for property, plant and equipment at 31 December 2017.

#### **Guarantees**

The parent entity does not have any guarantees at 31 December 2017.

#### H. OTHER ITEMS

This section sets out other disclosures that may be relevant to understanding the financial position and performance of the Group.

#### 22. Commitments

# (a) Tenement expenditure commitments

So as to maintain current rights to tenure of exploration tenements, the Group will be required to outlay amounts in respect of tenement rent to the relevant governing authorities and to meet certain annual exploration expenditure commitments. These outlays (exploration expenditure and rent), which arise in relation to granted tenements, inclusive of tenement applications are as follows:

	2017	2016
	\$	\$
Payable within 1 year	1,771,741	466,211
Payable between one and five years	1,420,951	2,018,228
	3,192,692	2,484,439

The outlays may be varied from time to time, subject to approval of the relevant government departments, and may be relieved if a tenement is relinquished. In 2017 cash security bonds totalling \$30,767 were held by the relevant governing authorities to ensure compliance with granted tenement conditions (2016: \$33,267).

## (b) Operating lease commitments

	2017	2016
	\$	\$
Payable within 1 year	50,071	49,090
Payable between one and five years	25,073	75,146
	75,144	124,236

The Company has leasing arrangements for the rental of office space expiring on 30 June 2019.

# 23. Contingent Liability

The Group does not have any contingent liability at 31 December 2017.

# 24. Share-based payments

The Company established an employee share option plan (ESOP 2012) which was approved by shareholders at the AGM on 24 May 2012. The purpose of the scheme was to give an additional incentive to Directors, employees and consultants, to provide dedicated and on-going commitment and effort to the Company.

Information of share options issued to the Company's employees and consultants is as follows:

for the year ended 31 December 2017

	Grant date	Expiry date	Exercise price	Balance at start of the year	Granted	Exercised	Expired/ other	Balance at end of the year
2017	15/03/2013	30/04/2019	\$0.10	5,000,000	-	-	-	5,000,000
2016	15/03/2013	30/04/2019	\$0.10	5,000,000	-	-	-	5,000,000

The remaining contractual life of the above share options outstanding at the end of the period was 0.3 years.

Information of share options issued to the Company's directors and Chief Executive Officer is as follows:

	Grant date	Expiry date	Exercise price	Balance at start of the year	Granted	Exercised	Expired/ other	Balance at end of the year
2017	31/05/2013	30/04/2019	\$0.10	3,000,000	-	-	-	3,000,000
2016	31/05/2013	30/04/2019	\$0.10	3,000,000	-	-	1	3,000,000

The remaining contractual life of the above share options outstanding at the end of the period was 0.3 years.

Set out below are the options exercisable at the end of the financial year:

		2017	2016
Grant date	Expiry date	Number	Number
21/09/2017	28/02/2018	60,000,000*	-
15/03/2013	30/04/2019	5,000,000	5,000,000
31/05/2013	30/04/2019	3,000,000	3,000,000

<sup>\* 25,000,000</sup> options were subsequently cancelled on 7 February 2018 (refer to Note 27).

#### 25. Related parties

# (a) Parent entity

The ultimate parent entity in the Group is Diatreme Resources Limited.

# (b) Subsidiaries

Interests in subsidiaries are set out in Note 20.

#### (c) Key management personnel

Disclosures relating to key management personnel are set out below and remuneration report in the directors' report.

#### Compensation

The aggregate compensation made to directors and other members of key management personnel of the Group is set out below:

	2017	2016
	\$	\$
Short-term employee benefits	469,182	471,194
Post-employment benefits	36,093	26,885
	505,275	498,079

(d) Transactions with related parties	2017	2016
The following transactions occurred with related parties:	\$	\$
Payment for specialist market and consultancy services from Fortune Corporation Australia Pty Limited (director-related entity of William Wang).	51,532	84,305
26. Remuneration of auditors		
	2017 \$	2016 \$
Previous auditor of the Company - BDO Audit Pty Ltd Audit and review of the financial statements	28,000	40,000
Current auditor of the Company – William Buck (Qld) Audit and review of the financial statements	20,000	-

Both the previous and current auditors did not provide any other services.

# 27. Events subsequent to balance date

11 January 2018	Cooperation and Consulting Services agreements signed with China ENFI Engineering Corporation (ENFI) replacing previous Memorandum of Understanding (MOU), for completion of Cyclone Zircon Project's definitive feasibility study (DFS).
31 January 2018	Completion of private placement to sophisticated investors to raise a total of \$490,000.
7 February 2018	The Company made an announcement to ASX on the inadvertent breach of ASX Listing Rule 10.11. The Company had issued 25,000,000 shares and 25,000,000 unlisted options to a director and an entity associated with a director in September 2017 without prior shareholder approval, resulting in an inadvertent breach of ASX Listing Rule 10.11. The Company has cancelled the options and will seek shareholder approval at an extra ordinary general meeting (EGM) on 5 April 2018 for the buy-back and cancellation of the shares at their issue price. At the EGM, the company will also seek shareholder approval for the issue of the same number of shares and unlisted options to a director and the entity associated with a director.
28 February 2018	35,000,000 unlisted options granted on 21 September 2017 were fully exercised and a total of \$420,000 was raised.

No matters or circumstances have arisen since the end of the financial year that has significantly affected, or may significantly affect the operations of the Group, the results of those operations, or the state of affairs of the Group in financial years subsequent to 31 December 2017.

# 28. New accounting standards and interpretations

At the date of authorisation of the financial report, certain Standards and Interpretations were on issue but not yet effective. These Standards and Interpretations, including AASB 9 Financial Instruments, AASB 15 Revenue from Contracts with Customers and AASB 16 Leases, have not been adopted in the preparation of the financial report for the year ended 31 December 2017. None of these Standards and Interpretations are expected to have significant effect on the consolidated financial statements of the Group. The Group expects to first apply these Standards and Interpretations in the financial report of the Group relating to the annual reporting period beginning after the effective date of each pronouncement.

# **Directors' Declaration**

In the directors' opinion:

- the attached financial statements and notes thereto comply with the Corporations Act 2001, the Accounting Standards, the Corporations Regulations 2001 and other mandatory professional reporting requirements;
- the attached financial statements and notes thereto comply with International Financial Reporting Standards as issued by the International Accounting Standards Board as described in note B to the financial statements;
- the attached financial statements and notes thereto give a true and fair view of the consolidated entity's financial position as at 31 December 2017 and of its performance for the financial year ended on that date; and
- there are reasonable grounds to believe that the company will be able to pay its debts as and when they become due and payable.

The directors have been given the declarations required by section 295A of the Corporations Act 2001.

Signed in accordance with a resolution of directors made pursuant to section 295(5)(a) of the Corporations Act 2001.

On behalf of the directors

William Wang

Non-executive Chairman

29 March 2018 Brisbane



# **Diatreme Resources Limited**

Independent auditor's report to the members

# Report on the Audit of the Financial Report

# **Opinion**

We have audited the financial report of Diatreme Resources Limited (the Company and its subsidiaries (the Group)), which comprises the consolidated statement of financial position as at 31 December 2017, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information, and the directors' declaration.

In our opinion, the accompanying financial report of the Group, is in accordance with the *Corporations Act 2001*, including:

- (i) giving a true and fair view of the Group's financial position as at 31 December 2017 and of its financial performance for the year ended on that date; and
- (ii) complying with Australian Accounting Standards and the Corporations Regulations 2001.

# **Basis for Opinion**

We conducted our audit in accordance with Australian Auditing Standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Report* section of our report. We are independent of the Group in accordance with the auditor independence requirements of the *Corporations Act 2001* and the ethical requirements of the Accounting Professional and Ethical Standards Board's APES 110 *Code of Ethics for Professional Accountants* (the Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

# **Material Uncertainty Related to Going Concern**

We draw attention to Note B(f) in the financial report, which indicates that the Group incurred a net loss after tax of \$1,418,526 during the year ended 31 December 2017 and had net cash outflows from operations of \$1,127,383, and, as of that date, the Group's current liabilities exceeded its current assets by \$1,836,941. As stated in Note B(f), these events or conditions, along with other matters as set forth in Note B(f), indicate that a material uncertainty exists that may cast significant doubt on the Group's ability to continue as a going concern. Our opinion is not modified in respect of this matter.

CHARTERED ACCOUNTANTS & ADVISORS

Lewel 21, 307 Queen Street Brisbane QLD 4000 GPIO Box 563 Brisbane QLD 4001 Telephone: +61 7 3229 5100 Williambuck.com

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## Other Matter - Predecessor Auditor

The financial reports of the Group for the year ended 31 December 2016 were audited by another auditor who expressed an unmodified opinion on that that financial report on 20 March 2017.

# **Key Audit Matters**

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial report of the current period. These matters were addressed in the context of our audit of the financial report as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

# **CARRYING VALUE OF EXPLORATION COSTS**

# Area of focus Refer also to note 11

Capitalised exploration and evaluation assets represent over 96% of the Group's total assets. The carrying value of exploration and evaluation assets is impacted by the Group's ability, and intention, to continue to explore and evaluate these assets. The results of these activities then determine the extent to which it may or may not be commercially viable to develop and extract identified reserves.

Due to the significance of this asset and the subjectivity involved in determining its carrying value and recoverable amount, this is a key audit matter.

#### How our audit addressed it

Our audit procedures included:

- A review of the directors' assessment of the criteria for the capitalisation of exploration and evaluation expenditure and their assessment of whether there are any indicators of impairment to capitalised costs;
- Considering the Group's intention and ability to continue activities necessary to support a decision to develop the exploration and evaluation assets, which included an assessment of the Group's ability to fund such activities and a review of their future budgets;
- Performing an assessment of whether any indicators of impairment existed in line with requirements of Australian Accounting Standards, including a review of the integrity of tenement title status and total commitments value;
- We assessed the adequacy of the Group's disclosures in respect of the carrying value of exploration costs.



# **Key Audit Matters (continued)**

#### **CONVERTIBLE NOTES**

# Area of focus Refer also to note 14

On 11 May 2015 the Group entered into a convertible note funding agreement for up to \$3 million.

A prior period error was identified in the current year relating to the accounting treatment and valuation of the convertible note.

In prior years, the Group recognised the convertible note as a hybrid instrument and calculated the fair value of the liability component using a market rate for an equivalent non-convertible note and allocated the remaining proceeds to the equity conversion option.

In calculating the fair value of the liability component, the Group based their calculating on the full proceeds received from each draw down being considered a future cash flow. This was incorrect, as the terms of the notes are structured such that only 50% of the proceeds received from each tranche are required to be repaid in cash, with the remainder to be converted to equity at a fixed conversion rate.

The Group has reversed the accounting treatment applied in prior years and has restated the financial statements accordingly.

The recognition and accounting for the Convertible Notes was considered a Key Audit Matter due to the magnitude of the prior period error and the complexity in accounting for such arrangements.

#### How our audit addressed it

Our audit procedures included:

- Understanding the terms of the funding agreement and ensuring the accounting treatment applied was in line with Australian Accounting Standards;
- Verifying that the values attributed to the transactions were in line with the terms of the funding agreement;
- We agreed all funds raised under the convertible note agreement to the receipt of cash:
- We assessed the discount rate and other key assumptions used in the Group's fair value measurements to internal and external data; and
- We assessed the adequacy of the Group's disclosures in respect of the convertible note and also the prior period error.

#### Other Information

The directors are responsible for the other information. The other information comprises the information in the Group's annual report for the year ended 31 December 2017, but does not include the financial report and the auditor's report thereon.

Our opinion on the financial report does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.



# Responsibilities of the Directors for the Financial Report

The directors of the Company are responsible for the preparation of the financial report that gives a true and fair view in accordance with Australian Accounting Standards and the *Corporations Act 2001* and for such internal control as the directors determine is necessary to enable the preparation of the financial report that gives a true and fair view and is free from material misstatement, whether due to fraud or error.

In preparing the financial report, the directors are responsible for assessing the ability of the Group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

# Auditor's Responsibilities for the Audit of the Financial Report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the Australian Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with the Australian Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit
  procedures that are appropriate in the circumstances, but not for the purpose of expressing an
  opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial report, including the
  disclosures, and whether the financial report represents the underlying transactions and events in
  a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the financial report. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.



We communicate with the directors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the directors with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the directors, we determine those matters that were of most significance in the audit of the financial report of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

# **Report on the Remuneration Report**

# **Opinion on the Remuneration Report**

We have audited the Remuneration Report included in pages 24 to 26 of the directors' report for the year ended 31 December 2017.

In our opinion, the Remuneration Report of Diatreme Resources Limited, for the year ended 31 December 2017, complies with section 300A of the *Corporations Act 2001*.

# Responsibilities

The directors of the Company are responsible for the preparation and presentation of the Remuneration Report in accordance with section 300A of the Corporations Act 2001. Our responsibility is to express an opinion on the Remuneration Report, based on our audit conducted in accordance with Australian Auditing Standards.

William Buck

William Buck (Qld) ABN 21 559 713 106

Junaide Latif

A Member of the Firm

Brisbane: 29 March 2018

# **Shareholder Information**

The information set out below was applicable at 17 April 2018.

# A DISTRIBUTION OF ASX QUOTED EQUITY SECURITIES

Analysis of numbers of equity security holders by size of holding:

# **Ordinary Shares**

Range	Holders	%	Shares	%
1 to 1,000	695	29.64	156,237	0.01
1,001 to 5,000	268	11.43	741,069	0.07
5001 to 10,000	202	8.61	1,715,130	0.16
10,001 to 50,000	484	20.64	13,200,891	1.23
50,001 to 100,000	206	8.78	16,903,643	1.57
100,001 and Over	490	20.90	1,041,592,621	96.95
Total	2,345	100.00	1,074,309,591	100.00

The number of security investors holding less than a marketable parcel on 17 April 2018 was 1,407 and they held 6,701,617 securities.

# **B** VOTING RIGHTS

The voting rights attaching to each class of equity securities are set out below:

#### **Ordinary Shares**

On a show of hands every member present at a meeting in person or by proxy shall have one vote and upon a poll each share shall have one vote.

# **Options**

No voting rights.

# C ASX QUOTED EQUITY SECURITY HOLDERS

The names of the twenty largest holders of ordinary shares (ASX:DRX) are listed below:

Rank	Name	Number of ordinary shares held	Percent (%)
1	MR YUFENG ZHUANG	160,983,890	14.98
2	MR ZHENBIN JIAN	82,000,000	7.63
3	VW PTY LTD	76,363,001	7.11
4	MS LAI YOU	53,177,747	4.95
5	CHENXIA ZHOU	50,000,000	4.65
6	MISS RUJING ZHUANG	41,666,667	3.88
7	HONGMING ZHANG	40,000,000	3.72
8	MR ANDREW TSANG	38,895,600	3.62
9	HSBC CUSTODY NOMINEES (AUSTRALIA) LIMITED	31,202,993	2.90
10	DORAL LTD	23,500,000	2.19
11	MR ZHANGXI ZENG	20,164,214	1.88
12	NG SOVEREIGN PTY LTD	20,000,000	1.86
12	MR STEPHEN JOHN RYAN	20,000,000	1.86
13	CAIFENG ZENG	16,666,667	1.55
14	XIANG RONG (AUSTRALIA) CONSTRUCTION GROUP PTY LTD	14,862,763	1.38
15	YUAN WANG	12,500,000	1.16
15	CHUNYI WANG	12,500,000	1.16
16	CINTRA GROUP LTD	10,000,000	0.93
16	THUUGAAR MINING AND RESOURCES PTY LTD	10,000,000	0.93
17	MR PETER HOWELLS	6,517,482	0.61
18	MR CHAOHUI ZHANG	6,316,309	0.59
19	MR DAVID NIX & MRS CAROLE NIX	5,958,705	0.55
20	MR GUOZHONG YU	5,133,333	0.48
	Total	758,409,371	70.60
	Balance of register	315,900,220	29.40
	Grand total	1,074,309,591	100.00

# D SUBSTANTIAL HOLDERS

Substantial holders of ordinary shares in the Company are set out below:

Name	Number of ordinary shares held	Percent (%)
Yufeng Zhuang	160,983,890	14.98
Andrew Tsang (and related parties)	116,536,110	10.85
Zhenbin Jian	82,000,000	7.63
VW Pty Ltd	76,363,001	7.11

# **Tenement Schedule**

Current interests in tenements held by Diatreme Resources Limited and its subsidiary companies as at 10 April 2018 are tabled below.

State	Project	ct Tenement Name Tenement ID Area		Area	Holder	Interest
WA	Cyclone	Cyclone	M69/141	1,558 ha	100%	LSPL
WA	Cyclone	Cyclone Extended	R69/1	1,227 ha	100%	DRX
QLD	Cape Bedford	Cape Bedford	EPM17795	552 km <sup>2</sup>	100%	DRX
QLD	Clermont	Clermont	EPM17968	252 km <sup>2</sup>	100%	CHAL
QLD	Tick Hill	Tick Hill	ML7094	130 ha	100%	DRX
QLD	Tick Hill	Tick Hill	ML7096	130 ha	100%	DRX
QLD	Tick Hill	Tick Hill	ML7097	130 ha	100%	DRX

# Abbreviations:

MWestern AustraliaMining LeaseDRX - Diatreme Resources LimitedRWestern AustraliaRetention LicenceCHAL - Chalcophile Resources Pty LtdEPMQueenslandExploration Permit for MineralsLSPL - Lost Sands Pty Ltd

ML Queensland Mining Lease

# **Ore Reserves and Mineral Resources Statement**

Ore Reserves and Mineral Resources are estimated using all available geological and relevant drill hole and assay data, including mineralogical sampling and analysis and test work on mineral recoveries and final product qualities. Reserve estimates are determined by the consideration of all of the "modifying factors" in accordance with the JORC Code, and for example, may include but are not limited to, product prices, mining costs, metallurgical recoveries, environmental consideration, access and approvals. Resource estimates are determined by consideration of geology, HM cut-off grades, mineralisation thickness vs. overburden ratios and consideration of the potential mining and extraction methodology.

The information in this report relating to Mineral Resources and Ore Reserves is based on information compiled by Competent Persons (as defined in the JORC Code). Each of the Competent Persons has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity they were undertaking to qualify as a Competent Person as defined by the JORC Code. Mr McMurtrie is a director of Tisana Pty Ltd and a consultant to Diatreme Resources and Mr Reudavey is a full-time employee of Diatreme Resources Limited. Mr McMurtrie and Mr Reudavey consent to the inclusion in this report of the matters based on their information in the form and context in which it appears.

The Mineral Resource and Ore Reserve figures reported represent estimates at 31 December 2017. All tonnes and grade information has been rounded, hence small differences may be present in the totals. All of the Mineral Resource information is inclusive of Ore Reserves (i.e. Mineral Resources are not additional to Ore Reserves).

The information in relation to the Cyclone Ore Reserve was prepared and disclosed under the JORC Code 2012 and reported in an announcement to the Australian Securities Exchange (ASX) on 15 June 2016 "Cyclone Study Reaffirms Project Profitability". The Cyclone Ore Reserve estimate is based on a Mineral Resource estimate for the Cyclone Project that was separately reported in an announcement to the Australian Securities Exchange (ASX) on 27 April 2017 "Exploration Activities Report Quarter Ended 31 March 2017" which complies with the guidelines of the 2012 JORC Code.

## Diatreme HM Ore Reserves at 31 December 2017

					HM Assemblage					
	Ore	Ore	In-situ HM	HM	Zircon	Rutile	Leuco	HiTi	Alt Ilm	Si-TiOx
Project	Reserve	Tonnes	Tonnes	Grade	Grade	Grade	Grade	Grade	Grade	Grade
-	Category	Millions	Millions	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Cyclone	Probable	138	3.52	2.6	28	3	7	23	13	22

#### Notes:

- 1. Cyclone Project is located in the Eucla Basin, Western Australia
- 2. Competent Person Ore Reserves, P McMurtrie (MAusIMM)
- 3. Ore Reserves are a sub-set of Mineral Resources.
- 4. Mineral assemblage is reported as a percentage of in situ heavy mineral (HM) content.
- 5. Rutile comprises Ti-Oxides >95% TiO<sub>2</sub>, Leuco (Leucoxene) comprises Ti-oxides 85 95% TiO<sub>2</sub>, HiTi comprises Ti-oxides 70 85% TiO<sub>2</sub>, Alt Ilm (Altered Ilmenite) comprises Ti-oxides <70% TiO<sub>2</sub>, Si-TiOx (Siliceous Ti-oxide) comprises Ti-oxides with >10% silica rich Ti minerals.

Diatromo	HM Oro	Posorvos	comparison	2016 to	2017
Diatreme	HIVI Ore	Reserves	comparison	2016 10	2017

Project	Ore Reserve Category	2016 Ore Tonnes Millions	2016 HM Grade (%)	2016 In-situ HM Tonnes Millions	2017 Ore Tonnes Millions	2017 HM Grade (%)	2017 In-situ HM Tonnes Millions	In-situ HM Tonnes Millions Change
Cyclone	Probable	138	2.6	3.52	138	2.6	3.52	0.00

The annual review of Ore Reserves concluded that in the absence of new exploration data and/or feasibility studies during 2017, the Cyclone Ore Reserve has remained constant.

### Diatreme HM Mineral Resources at 31 December 2017

					HIVI Assemblage					
	Mineral	Material	In-situ HM	HM	Zircon	Rutile	Leuco	HiTi	Alt Ilm	Si TiOx
Project	Resource	Tonnes	Tonnes	Grade	Grade	Grade	Grade	Grade	Grade	Grade
	Category	Millions	Millions	(%)	(%)	(%)	(%)	(%)	(%)	(%)
Cyclone	Measured	156	3.81	2.4	28	3	6	24	12	22
-	Indicated	48	0.89	1.9	21	2	5	33	16	18
Cyclone	Total	203	4.70	2.3	27	3	6	26	13	21

- 1. Cyclone Project is located in the Eucla Basin, Western Australia
- 2. Competent Person Mineral Resources, I Reudavey (MAIG)
- 3. Mineral Resources are inclusive of Ore Reserves.
- 4. Rounding may generate differences in last decimal place.
- 5. Mineral assemblage is reported as a percentage of in situ heavy mineral content.
- 6. Rutile comprises Ti-oxides >95% TiO<sub>2</sub>, Leuco (Leucoxene) comprises Ti-oxides 85 90% TiO<sub>2</sub>, HiTi comprises Ti-oxides 70 85% TiO<sub>2</sub>, Alt Ilm (Altered Ilmenite) comprises Ti-oxides <70% TiO<sub>2</sub>, Si TiOx (Siliceous Ti-oxide) comprises Ti-oxides with >10% silica rich Ti minerals.

The information in relation to the Cyclone Mineral Resource is reported in compliance with the 2012 JORC Code, with the most recent ASX announcement to the Australian Securities Exchange (ASX) on 27 April 2017 "Exploration Activities Report Quarter Ended 31 March 2017".

# Diatreme HM Mineral Resource comparison 2016 to 2017

Project	Mineral Resource Category	2016 Material Tonnes Millions	2016 HM Grade (%)	2016 In-situ HM Tonnes Millions	2017 Material Tonnes Millions	2017 HM Grade (%)	2017 In-situ HM Tonnes Millions	In-situ HM Tonnes Millions Change
Cyclone	Measured	156	2.4	3.81	156	2.4	3.81	0.00
	Indicated	48	1.9	0.89	48	1.9	0.89	0.00
Cyclone	Total	203	2.3	4.70	203	2.3	4.70	0.00

The annual review of Mineral Resources concluded that in the absence of new exploration data and/or feasibility studies during 2017, the Cyclone Mineral Resource has remained constant.

# **Diatreme Gold Mineral Resources at 31 December 2017**

Project	Mineral Resource Category	Material Tonnes '000 t	Gold Grade (g/t)	In-situ Gold Troy Ounces
Tick Hill Tailings Tick Hill Tailings	Indicated	630	1.08	21,800
	<b>Total</b>	<b>630</b>	<b>1.08</b>	<b>21,800</b>

- 1. Tick Hill Project is located in the Mt Isa province, Queensland
- 2. Competent Person Mineral Resources, I Reudavey (MAIG)
- 3. Mineral Resource relates to tailings material within capped tailings storage facility.

The information in relation to the Tick Hill Tailings Mineral Resource was prepared and disclosed under the JORC Code 2012 and reported in an announcement to the Australian Securities Exchange (ASX) on 19 January 2016 "Maiden Gold Resource for Tick Hill Tailings".

# Diatreme Gold Mineral Resource comparison 2016 to 2017

Project	Mineral Resource Category	2016 Material Tonnes '000 t	2016 Gold Grade (g/t)	2016 In-situ Gold t Oz's	2017 Material Tonnes '000 t	2017 Gold Grade (g/t)	2017 In-situ Gold t Oz's	In-situ Gold t Oz's Change
Cyclone	Indicated	630	1.08	21,800	630	1.08	21,800	0.00
Cyclone	Total	630	1.08	21,800	630	1.08	21,800	0.00

The annual review of Mineral Resources concluded that in the absence of new exploration data and/or feasibility studies during 2017, the Tick Hill Tailings Mineral Resource has remained constant.

#### Mineral Resource and Ore Reserve Governance

Mineral Resource and Ore Reserves are estimated by suitably qualified Diatreme personnel in accordance with the requirements of the JORC Code, using industry standard techniques and internal guidelines for the estimation and reporting of Ore Reserves and Mineral Resources.

All Mineral Resource and Ore Reserve estimates and supporting documentation are reviewed by a Competent Person employed by Diatreme Resources.

All Ore Reserve estimates are prepared in conjunction with pre-feasibility studies which consider all material factors.

The Ore Reserves and Mineral Resources Statement included in the Annual Report is reviewed by suitably qualified internal Competent Person prior to its inclusion.







Unit 8, 55-61 Holdsworth Street Coorparoo, Queensland, 4151

Telephone: 07 3397 2222 Email: manager@diatreme.com.au

www diatreme com au

