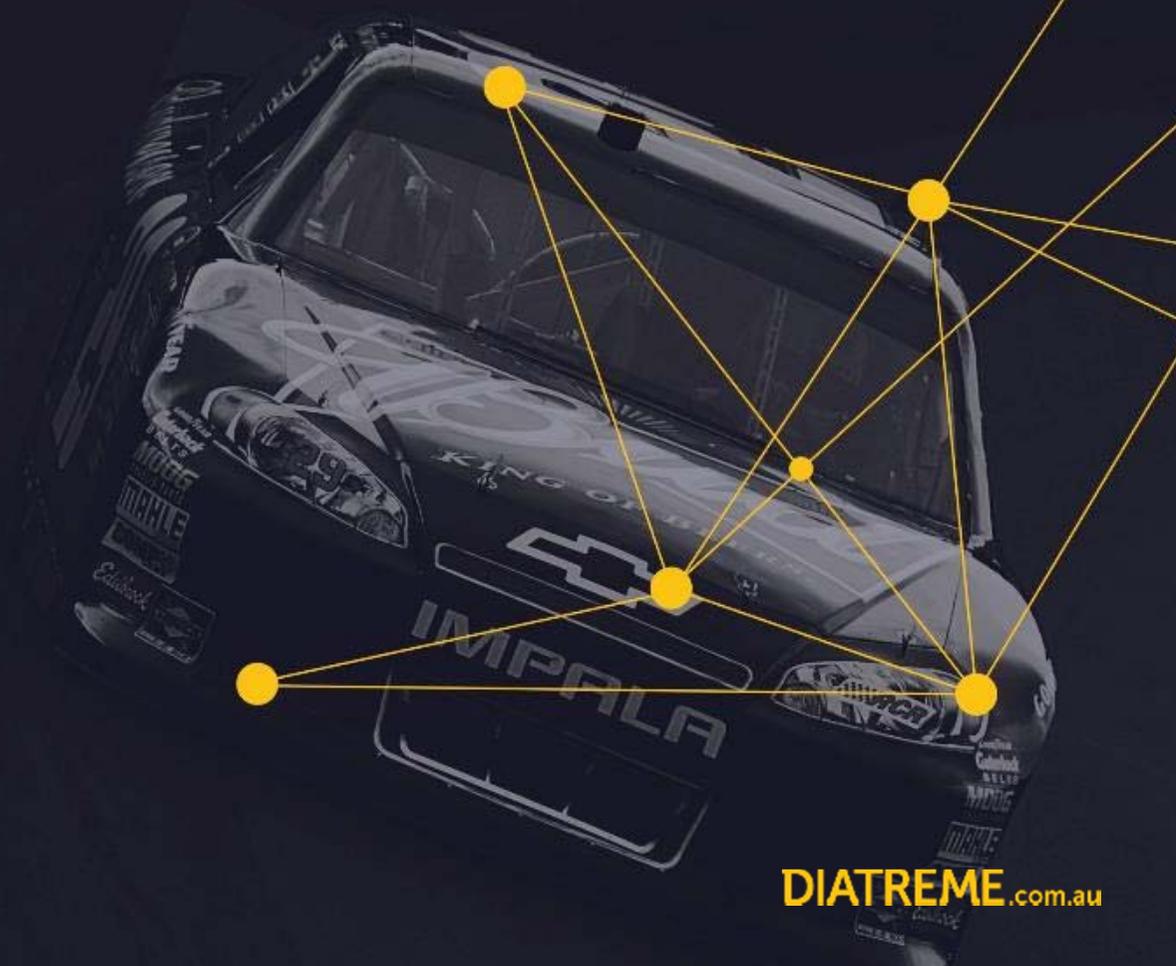


Diatreme Resources – ASX:DRX

Company Presentation – March 2019

*High-grade silica sands project
located adjacent to the
world's largest silica sand mine*



DISCLAIMER



This presentation contains certain forward-looking statements and forecasts which include without limitation, expectations regarding future performance, exploration, mineral resources, the financial position of Diatreme Resources Limited (the "Company"), industry growth or other trend projections.

Whilst this presentation is based on information from sources which are considered reliable, the Company, its directors, employees and consultants do not represent, warrant or guarantee, expressly or impliedly, that the information in this presentation is complete or accurate. To the maximum extent permitted by law, the Company disclaims any responsibility to inform any recipient of this presentation of any matter that subsequently comes to its notice, which may affect any of the information contained in this document and presentation.

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Cautionary Statement

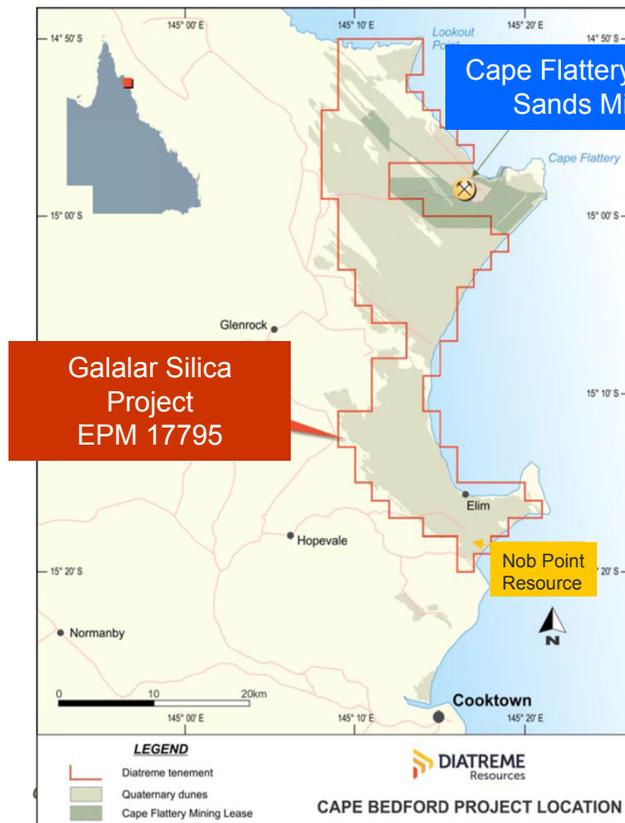
Whilst Diatreme Resources has concluded that it has a reasonable basis for providing the forward looking statements included in this presentation, Diatreme Resources advises that given the current price of zircon and the company's current market capitalisation (compared to the capital expenditure required in connection with the Cyclone Zircon Project), the production targets and forecast financial information contained in this presentation do not provide an absolute assurance of economic development at this stage. The stated production targets and forecast financial information contained in this presentation are based on detailed PFS studies and Diatreme Resources' current expectations of future results or events, including sourcing of project development finance within the targeted timeline and/or attracting suitable project major financial partners and should not be relied upon by investors when making investment decisions

Additional Information

This presentation should also be read in conjunction with the DRX Annual Report for 2017 and the June 2018 Quarterly Activities report together with any announcement made by Diatreme in accordance with its continuous disclosure obligations under the Corporations act including:

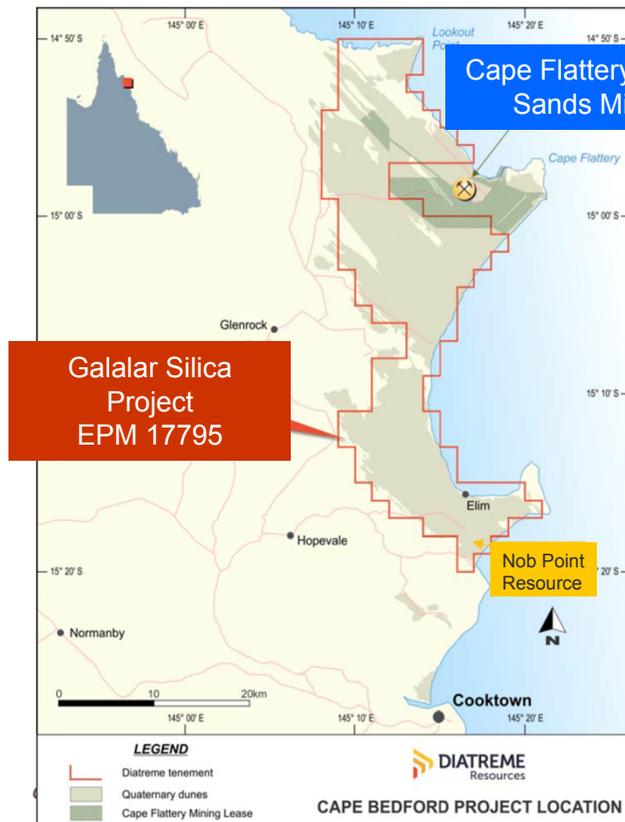
- ASX release regarding Cyclone Resource Update – dated 23rd January 2012
- ASX release regarding Cyclone Maiden Ore Reserve Estimate – dated 7th February 2012
- ASX release regarding Cyclone PFS Results – dated 20th March 2012
- ASX release regarding Cyclone Native Title Agreement executed – dated 17th November 2014
- ASX release regarding Cyclone Mining Lease granted – dated 24th November 2014
- ASX release regarding Acquisition of Cyclone Extended increase Cyclone mine life – dated 14th December 2015
- ASX release regarding Cyclone Project Enhancement Study by Sedgman – dated 15th June 2016
- ASX release regarding Cyclone Environmental Approval granted – dated 9th of January 2017
- ASX release regarding Cape Bedford Maiden Resource – dated 13th August 2018
- ASX release regarding Cape Bedford Bulk Sample Testwork Results – dated 16th August 2018
- ASX release regarding Cyclone Project Update – dated 17th September 2018
- ASX release regarding Cape Bedford Project Update – dated 2nd October 2018
- ASX release regarding Cyclone Project BFS release – dated 15th November 2018
- ASX release regarding Launch of Galalar Silica Project – dated 5th December 2018
- ASX release regarding Bulk sample testing results at Galalar Silica Project – dated 24th January 2019
- ASX release regarding Galalar Silica Project exploration update – dated 7th February 2019
- ASX release regarding Galalar Silica resource expanded by 22% to 26.40m tonnes – dated 7th March 2019
- ASX release regarding Sale of Tick Hill Gold Project – dated 12th March 2019

DIATREME – AT A GLANCE



- ASX-listed silica sands development company
- Flagship project – Galalar Silica Project in QLD
- Short-term pathway identified to cashflow via low capex project, targeting production by 2020
- Inferred Resource – 26.4 Mt high-quality silica sand $\text{SiO}_2 > 99\%$
- Bulk testing confirms product can meet solar panel manufacture requirement of sub 100 PPM Fe_2O_3
- Significant re-rating potential based on upcoming milestones

IN GOOD COMPANY.....



- Diatreme Resource's Galalar Silica Project surrounds Cape Flattery Silica Mines
- Cape Flattery Silica Mines is a world class producer of silica sand for the Glass, Foundry and Chemical industries
- Owned by Mitsubishi Corporation
- Highest production of silica sand for any mine in the world

CORPORATE SNAPSHOT



Capital Structure	ASX: DRX
Shares on Issue	1,330 Million
Options on Issue (Listed 60.8m, unlisted 6m)	66.8 Million
Share Price (15 th March 2019)	A\$0.014
Market Capitalisation (as at 15 th March 2019)	A\$18.6 Million
Cash and Liquids ¹	\$1.5 Million
Debt ²	\$1.5 Million

Substantial Shareholders (15 Feb 2019)	Interest
Mr Yufeng (Daniel) Zhuang	12.10%
Ms Jie Wu	6.55%
Mr Zhenbin Jian	6.16%
VW Pty Ltd	5.67%
Total Interest of Top 20 Shareholders	64.57%
Directors' Interest	12.42%

Board of Directors	Position
Gregory Starr	Non-Executive Chairman
William Wang	Non Executive Director
Daniel Zhuang	Non Executive Director

Management	Position
Neil McIntyre	Chief Executive Officer
Neil Forbes	Chief Geologist
Phil McMurtrie	Project Manager
Tuan Do	CFO

1. Includes cash at bank plus bonds to be refunded imminently ~\$500k, plus ASX listed shares held ~\$1.0m (see slide 38)
2. Unsecured Debt Facility, repayment 31 July 2020

EXPERIENCED BOARD



- **Mr Gregory Starr – Chairman** (non-executive director)
 - Extensive 25yrs plus senior management experience in minerals exploration, managing operating mines, asset acquisitions/divestments and project finance
- **Mr Cheng (William) Wang** (non-executive director)
 - Extensive Chinese SOE management and negotiating experience, including 15 years as head of international commodities at CITIC. Director of China Century Capital Ltd, Jupiter Mines Ltd & Gulf Alumina Ltd
- **Mr Yufeng (Daniel) Zhuang** (non-executive director)
 - Significant DRX shareholder – Ex-Ping An Securities Beijing & Fujian Mingxing Group Zhangzhou, China
 - Construction, hotels and food manufacturing interests in China

EXPERIENCED MANAGEMENT TEAM



- **Mr Neil McIntyre – CEO**, 25 yrs experience in banking, finance, resources
 - 4 years as Diatreme CEO and 3 years as non-executive director
 - Led Cyclone de-risking, traditional owner negotiations, permitting and approvals process
 - Ex-MD Pacific Capital Ltd, State Manager (Structured & Asset Finance) QIDC
 - Ex-Chairman Niuminco Ltd (PNG gold assets); executive director Belvedere Ltd (Yanderra PNG copper/gold assets) and Indon Energi Ltd
- **Mr Phil McMurtrie – Project Manager, Cyclone & Galalar Silica Projects**; 35 yrs experience mining, 25 yrs mineral sands
 - Mining engineer with experience at Hammersley Iron, Qld Nickel and ex-mine manager at Consolidated Rutile's Stradbroke Island operation
 - Cyclone Project Manager for PFS/DFS studies and project implementation planning
- **Mr Neil Forbes – Geologist**, 25 yrs in exploration/mining
 - Extensive exploration experience in gold, base metals, coal and silica
 - Previous exploration manager for Metallica and Metro Coal; led Metro Coal team that delineated 4Bt of thermal coal
- **Mr Tuan Do – CFO**, 30 yrs experience, 10 yrs resources sector
 - Chartered Accountant, with senior corporate accounting experience at Peabody Australia and Intrepid Mines
 - Experienced in financial reporting, treasury management, capital raisings and start-up operations in mining sector

GALALAR

SILICA SANDS
PROJECT



SILICA, CONSTRUCTION SAND



Silica sand is primarily quartz broken down over time into fine granules. Main end uses glass industry, foundry, hydraulic fracturing, filtration and abrasives.



Construction sand is a major global industry, with more than 15Bt of sand mined for construction in 2017. Main component in various building/construction products.

SILICA IN DEMAND

GLOBAL SILICA SAND MARKET VOLUME AND VALUE

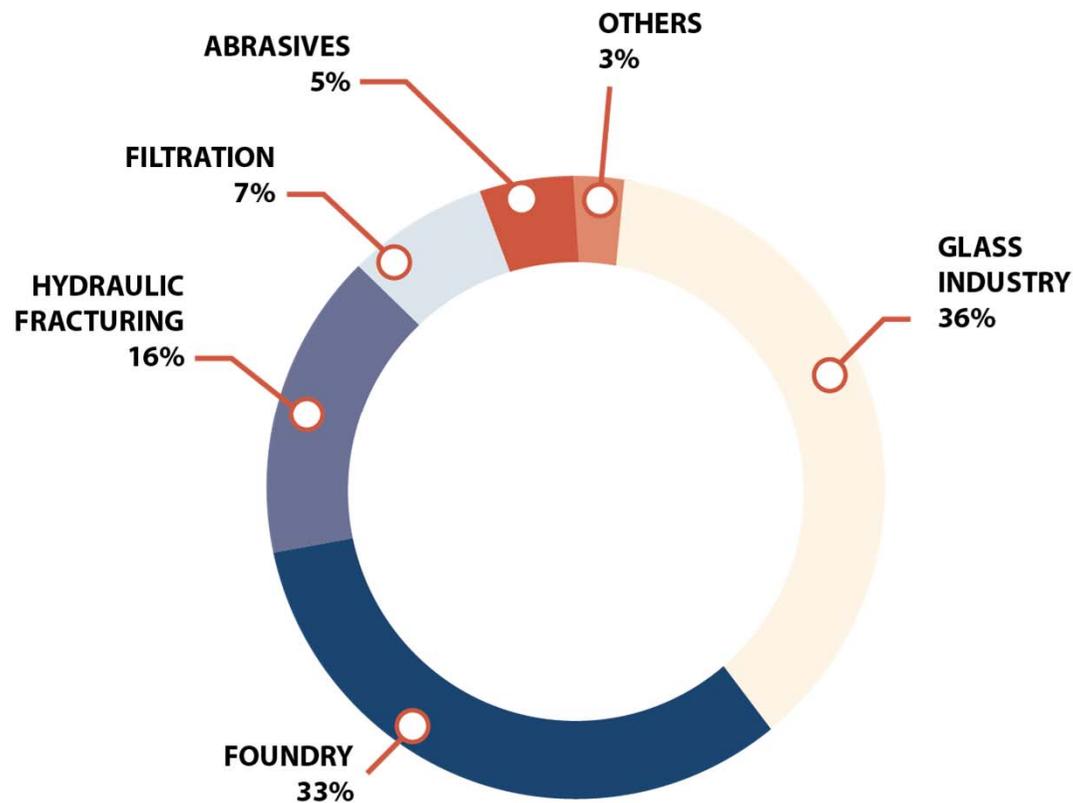
TRENDS 2009 - 2017



- IMARC* forecasts CAGR of 7.2% p.a. through to 2022, reaching US\$9.6B revenues
- Increasing demand from automotive, construction industries
- No direct substitutes in majority of applications

* Refer DRX announcement, 30 November 2017

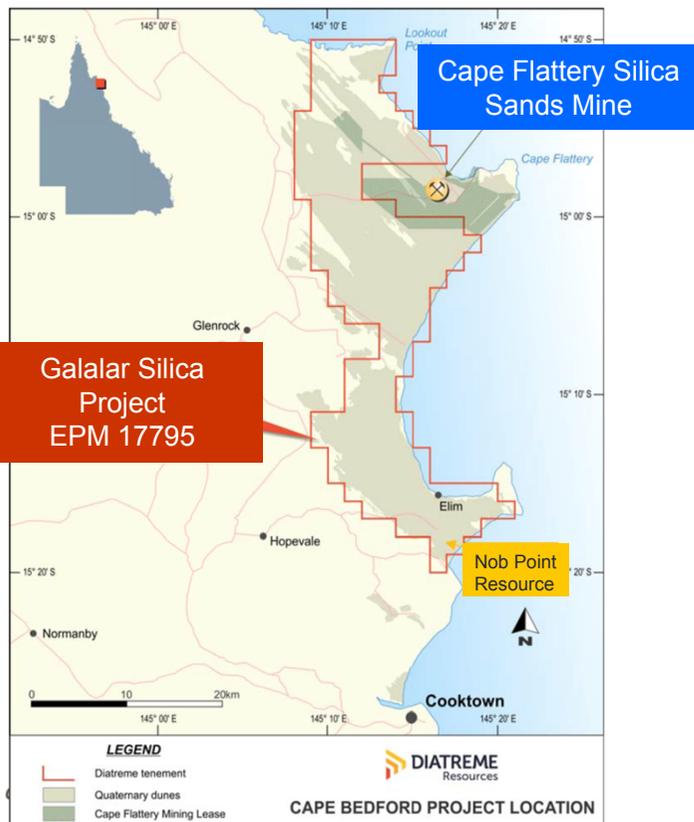
SILICA MARKETS



Source: Analyst Reports & IMARC Estimates (% of Volume)

- IMARC expects high growth in demand from North America, Latin America & Western Europe due to increasing hydraulic fracturing
- Increasing demand also from emerging markets such as China and India from foundry and construction industries

GALALAR SILICA PROJECT



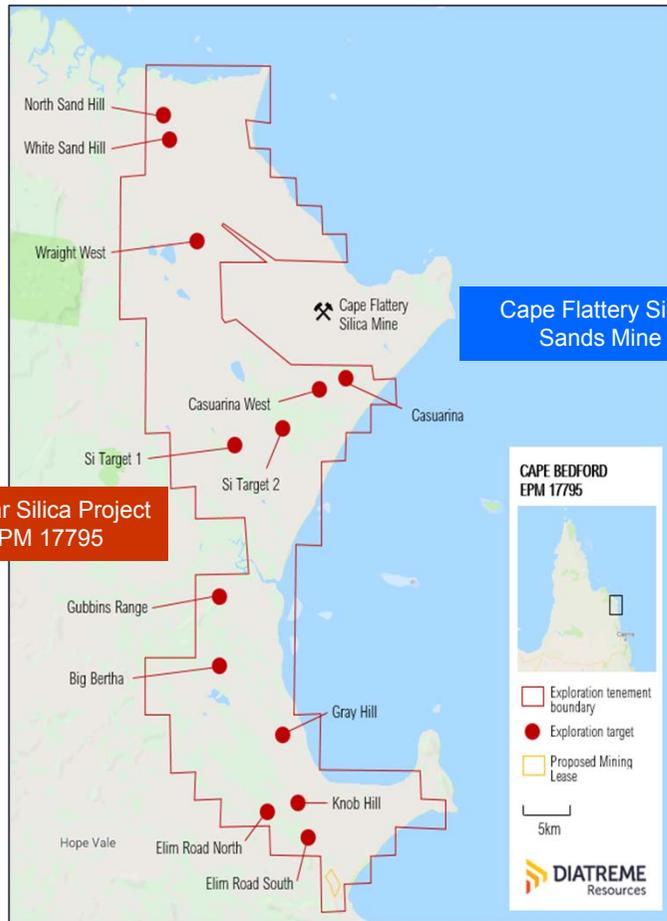
- High-grade silica sand/heavy mineral sands, located near world's largest silica sand mine
- Maiden Inferred Resource Aug. 2018, expanded March 2019
 - Nob Point resource – **26.4Mt @ > 99% silica**
- Bulk sample testwork shows high 88% recovery rate, low level of slimes (3%) & HM (0.19%)
- Initial conceptual production est. 500,000 tpa then potentially ramping up to 1mtpa
- Further in-fill resource drilling program underway
- Offshore bulk test-work (China) confirms potential high-tech applications for high-grade , sub >100ppm iron - silica sand (99.9%)

PROJECT OWNERSHIP – TRADITIONAL OWNERS

- Traditional owners (TO's) – Hopevale Congress will hold a 12.50% “free carry” interest in the Galalar Silica project
- Traditional owners hold freehold and native title over entire tenement area
- Initial Community meetings held prior to any exploration activity – Conduct and Compensation and Cultural Heritage agreements already in place
- Genuine win/win for TO's who have given full support for Project development
- TO's jointly attend all Government and line agency meetings to assist in project advancement



MULTIPLE EXPLORATION TARGETS



- Two potential major resource extension targets identified north west of existing proposed ML area at Elim Road North and Elim Road South
- Further identified regional targets to be graded following current sampling program testing for silica purity, Iron (Fe) levels, ease of access for exploration and potential for commercial product export.

Note: Resource targets are not yet fully defined and will be subject to further drilling and exploration activity

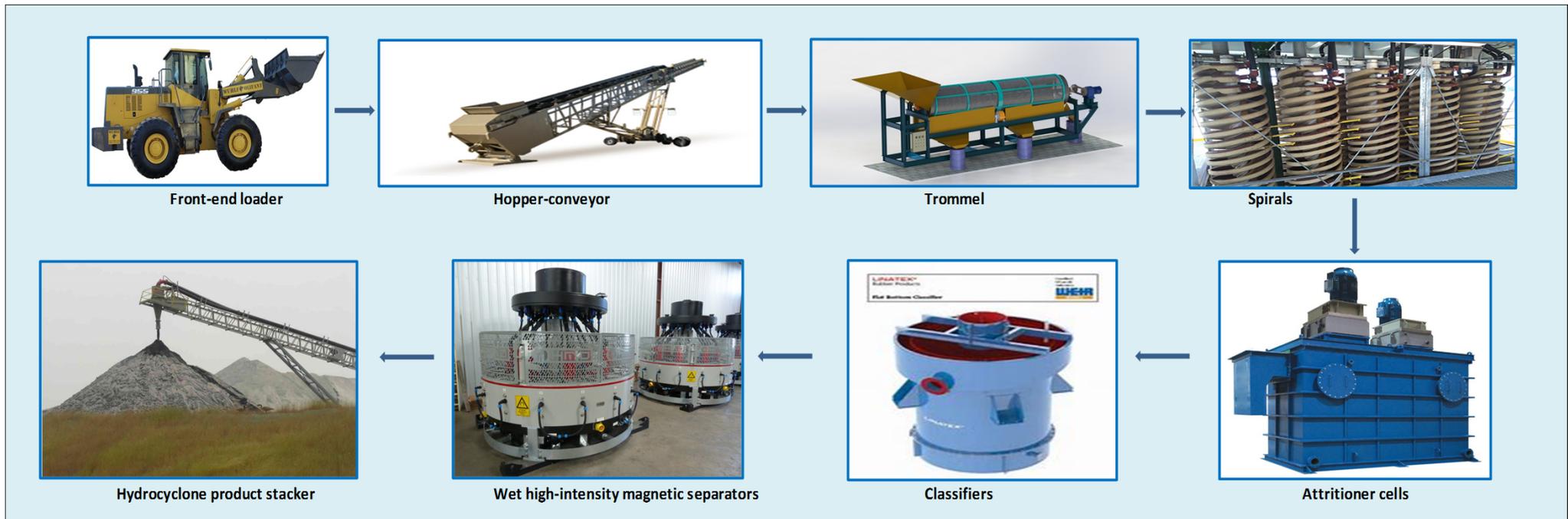
CONCEPTUAL PROCESSING

Simple and established processing techniques

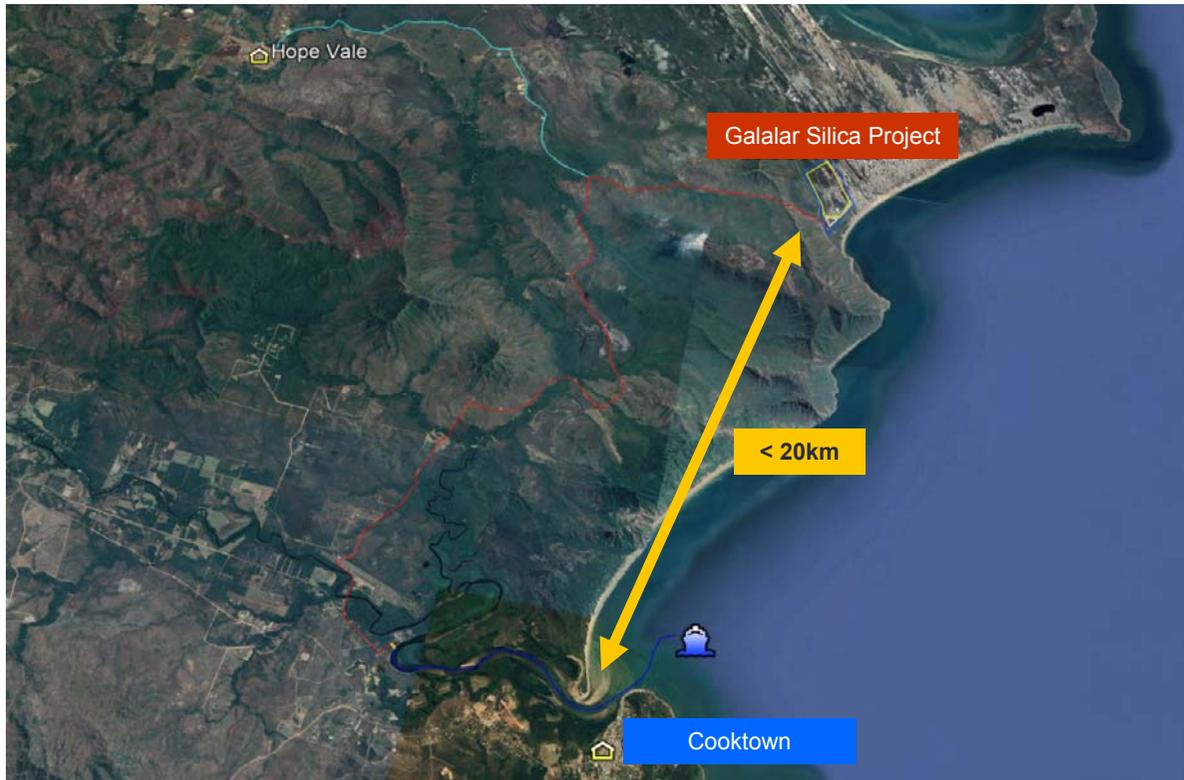
No chemicals or dust

Amenable to low CAPEX

Amenable to low OPEX



CONCEPTUAL LOGISTICS



- Existing road network close to proposed mining operations. Will require some upgrading
- Direct road access to Cooktown
- Use of existing barge ramp facility – subject to upgrading
- Simple truck (<30km one way) and barge operations
- Tranship bulk product within Cooktown designated Port

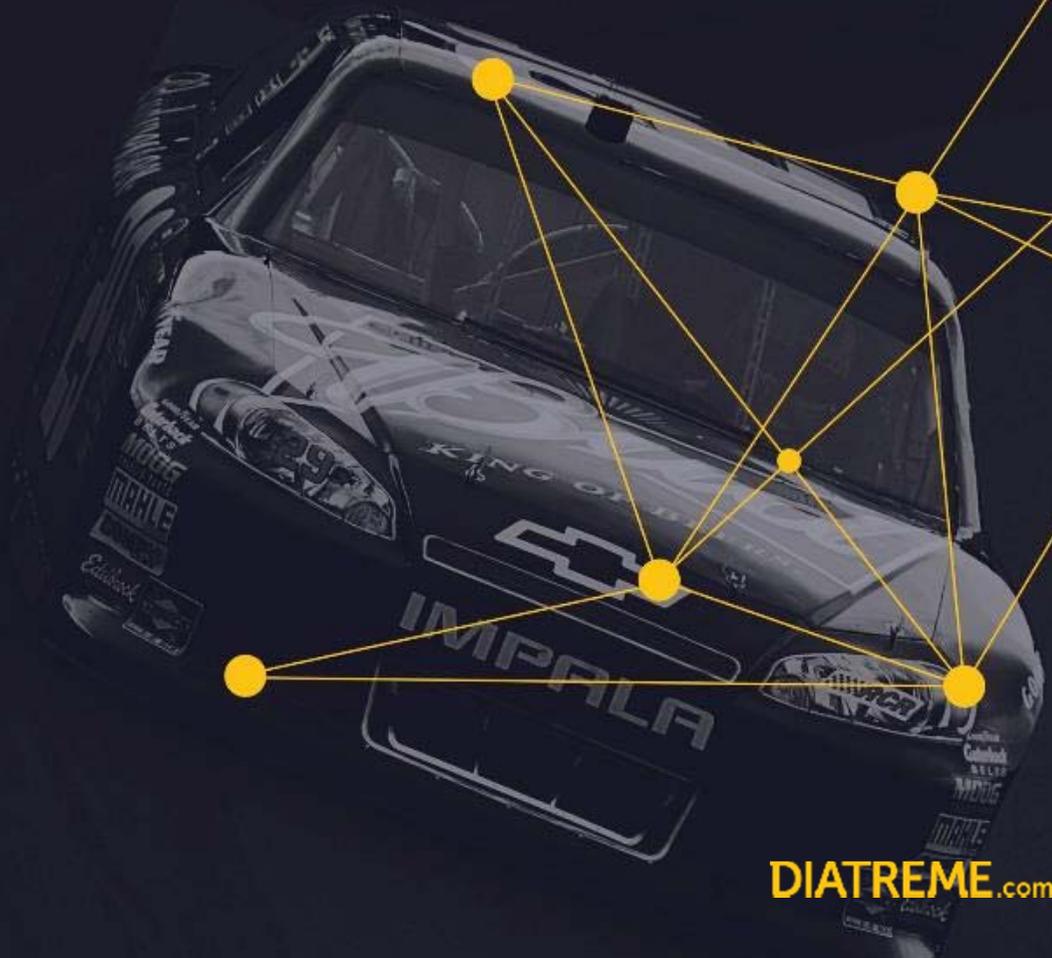
Note: Cooktown option conceptual and still subject to further detailed commercial and final permitting studies and relevant approvals

UPCOMING MILESTONES DRIVING SHAREHOLDER VALUE



INVESTMENT OPPORTUNITY

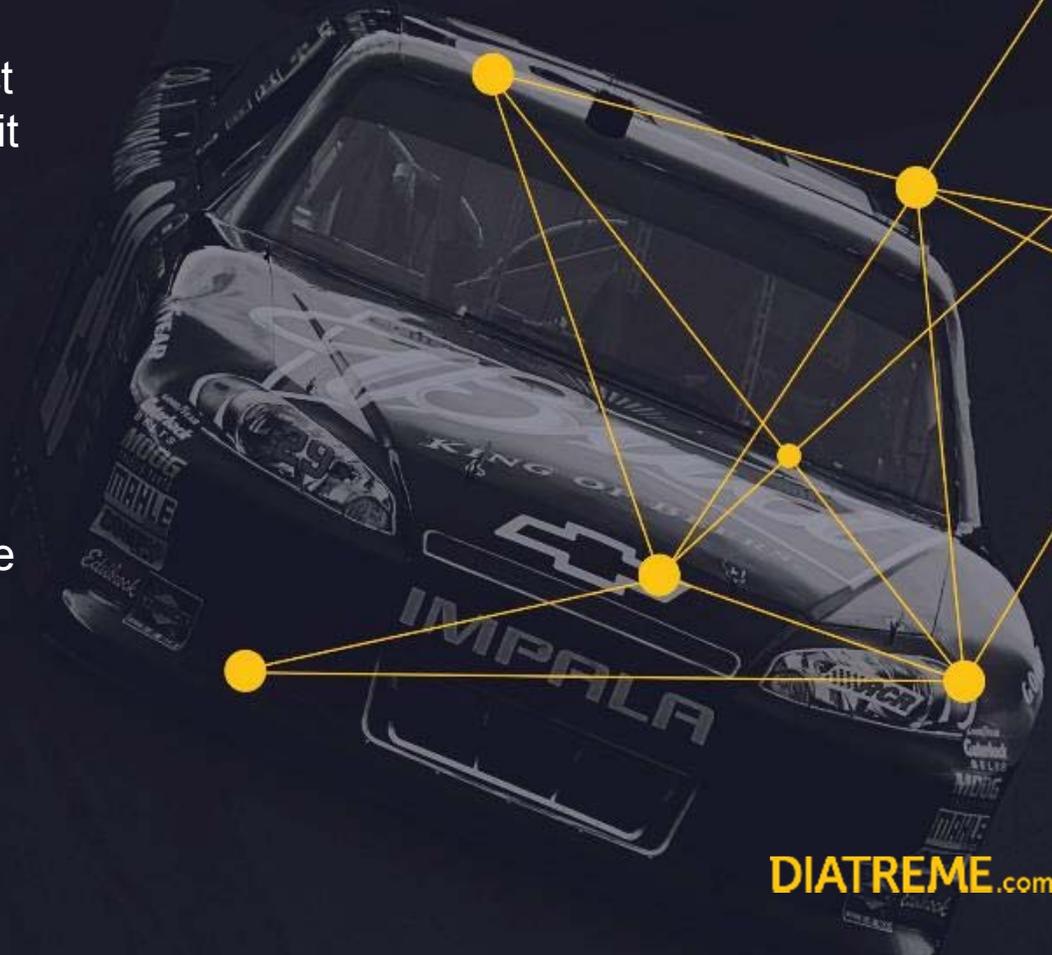
- Near-term silica sand production opportunity at Galalar Silica Project, with low capex and opex
- Silica sands exposure next to the world's largest silica sands project
- DRX expects further company value re-ratings from project positive news flow
- Additionally, potential for value to be realised for Cyclone Zircon Project (see over)



ADDITIONALLY - MAXIMUM VALUE FOR CYLONE



- Blackbird Partners appointed to support progression of the Cyclone Zircon Project and ensure maximum shareholder benefit received
- All primary project approvals in place - Mining Lease, TO Agreements, Environmental Approvals
- JORC Resource: 211Mt @ 2.3% VHM
- Sufficient reserves to support a long mine life -Currently 14 years at 10Mtpa
- Any funds received from a potential transaction would be used to maximise shareholder value



DIATREME CONTACT DETAILS

Neil McIntyre, Chief Executive
07 33972222 or 0468 370 660
neil.mcintyre@diatreme.com.au

William Wang , Director
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DIATREME.com.au



APPENDIX

CYCLONE

ZIRCON PROJECT



HEAVY MINERAL SANDS

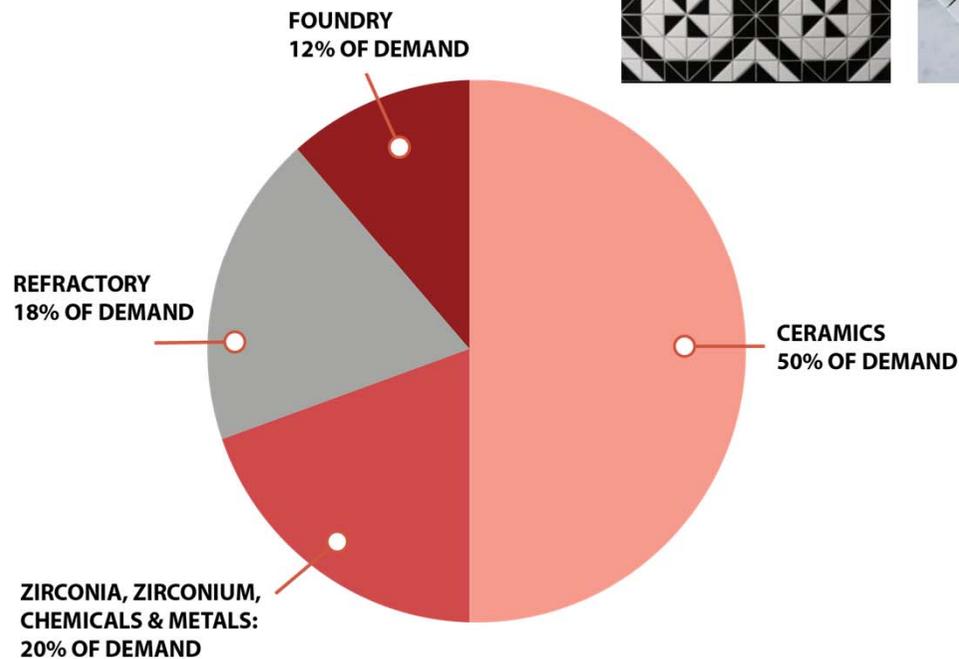
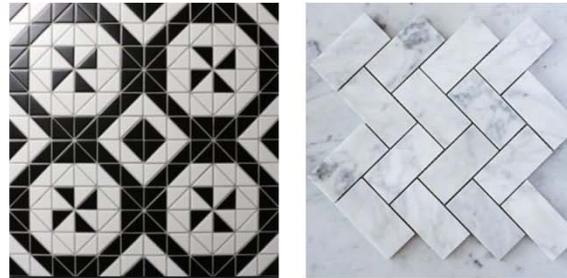


Zircon is an opaque, hard wearing, inert mineral, with around 1.1Mt produced globally in 2014. It is primarily used to produce ceramic tiles, as well as specialty applications.



Titanium dioxide is mined as ilmenite, rutile or leucosene. 7.25Mt of titanium feedstocks were produced in 2014 for pigments in paints, plastics, paper and titanium metal.

ZIRCON USES



- Most valuable heavy mineral with current prices US\$1,580/t (up from US\$1,030 a year ago)
- Approx. 1.1m tonnes produced globally in 2014
- Used primarily in production of ceramic tiles
- Other applications include refractories, foundry casting
- Speciality applications in nuclear fuel rods, jet turbine blades

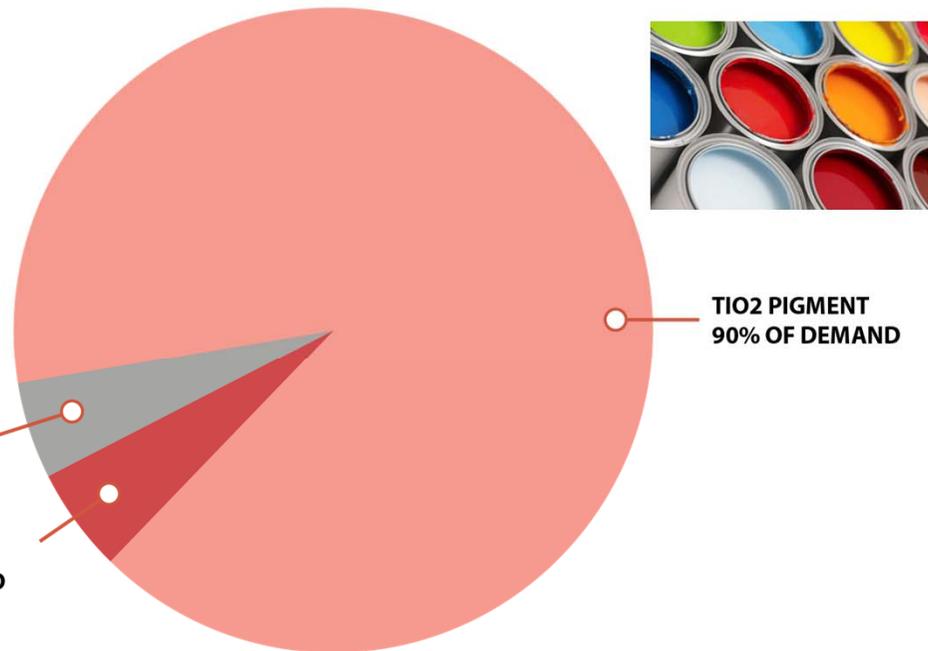
TITANIUM USES



**TITANIUM METAL:
5% OF DEMAND**



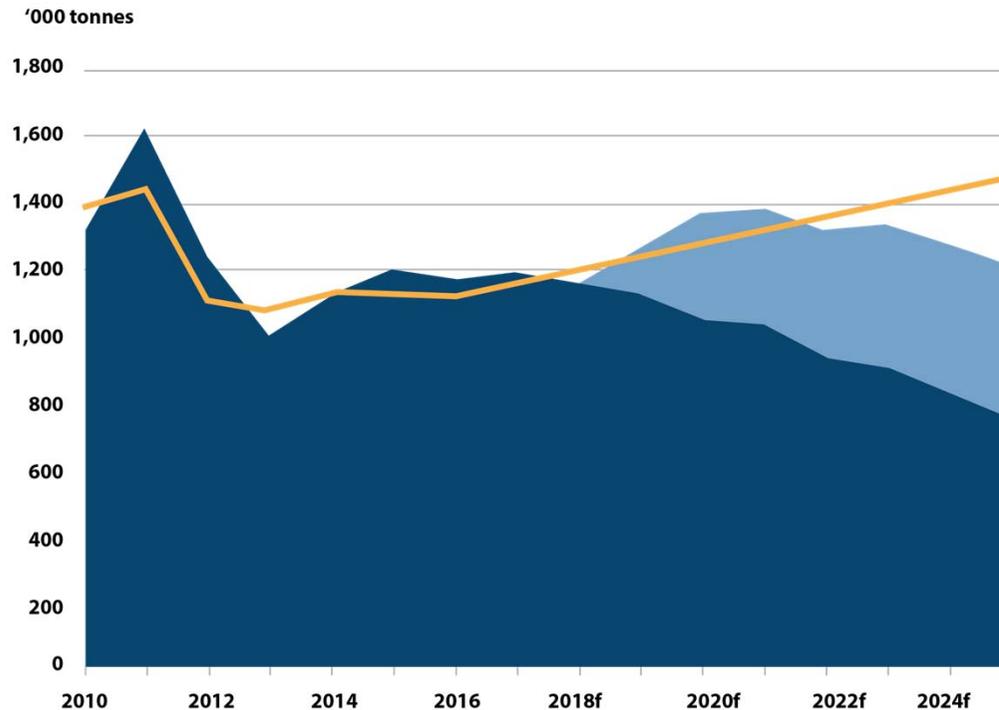
**WELDING ROD:
5% OF DEMAND**



**TIO2 PIGMENT
90% OF DEMAND**

- Around 7m tpa global market
- Used primarily in pigments
- Demand increasing due to China's higher environmental standards and technological advancements
- Rutile prices up 20% on H1 2017 & 14% increase in H2 2018

ZIRCON IN DEMAND



Source: TZMI, May 2017

- Increasing demand driven by urbanisation and global growth
- Supply constrained with depleting supply and grade/assemblage decline
- Lack of new high-grade projects with challenges including technical issues, costs and sovereign risk
- TZMI predicts structural deficit to widen from 2019 amid estimated 2.1% CAGR through to 2021

PROJECT OVERVIEW

JORC Mineral Resource

- 211 million tonnes
- 2.3% valuable heavy mineral (VHM)

JORC Ore Reserve

- 138 million tonnes
- 2.6% heavy mineral

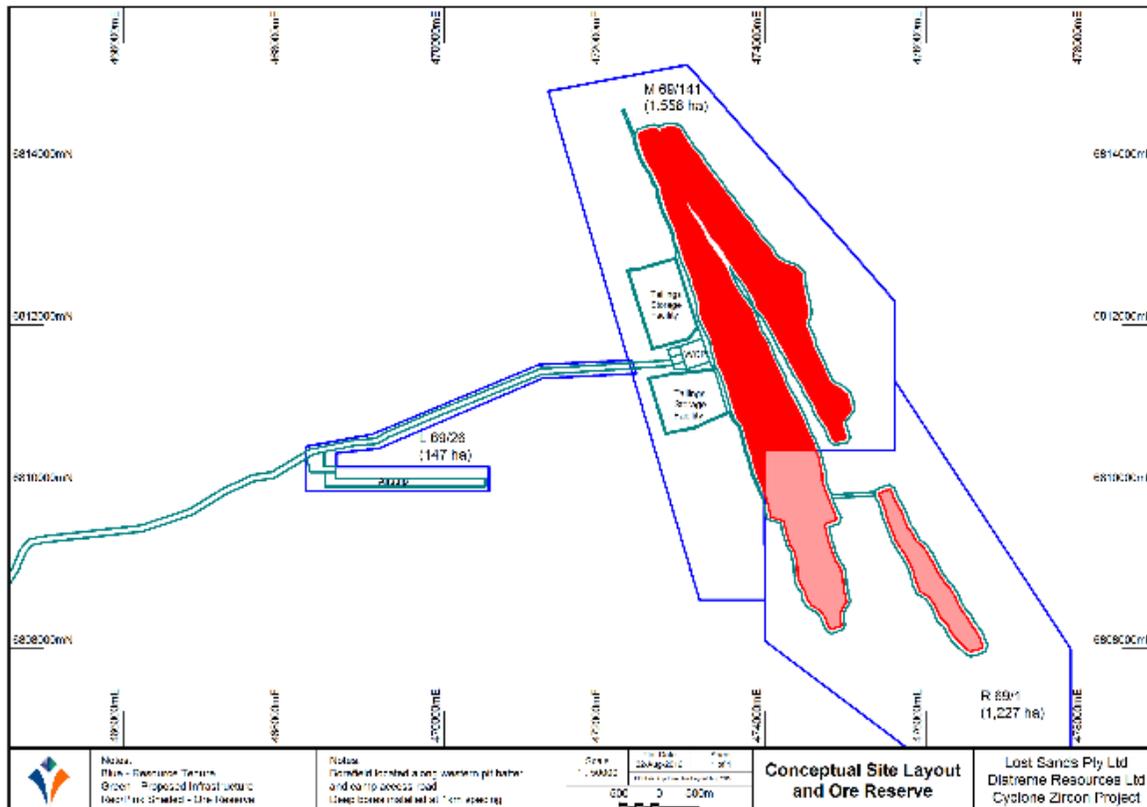
High Zircon mineral assemblage

- 30% of VHM is zircon
- 80,000t zircon per year (first 3 years)

One of only 3 significant zircon discoveries in the last decade

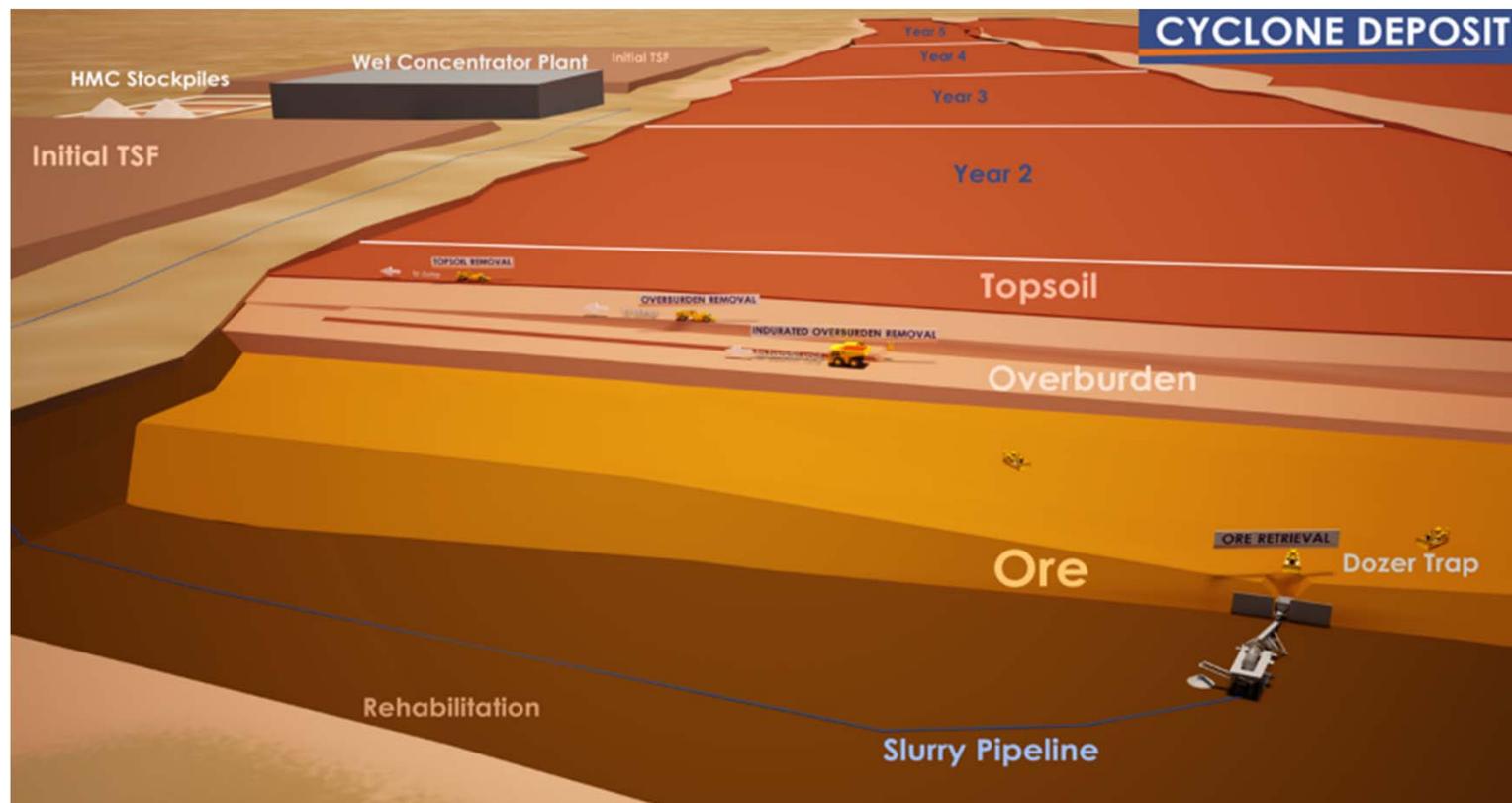


MINING LEASE & LAYOUT

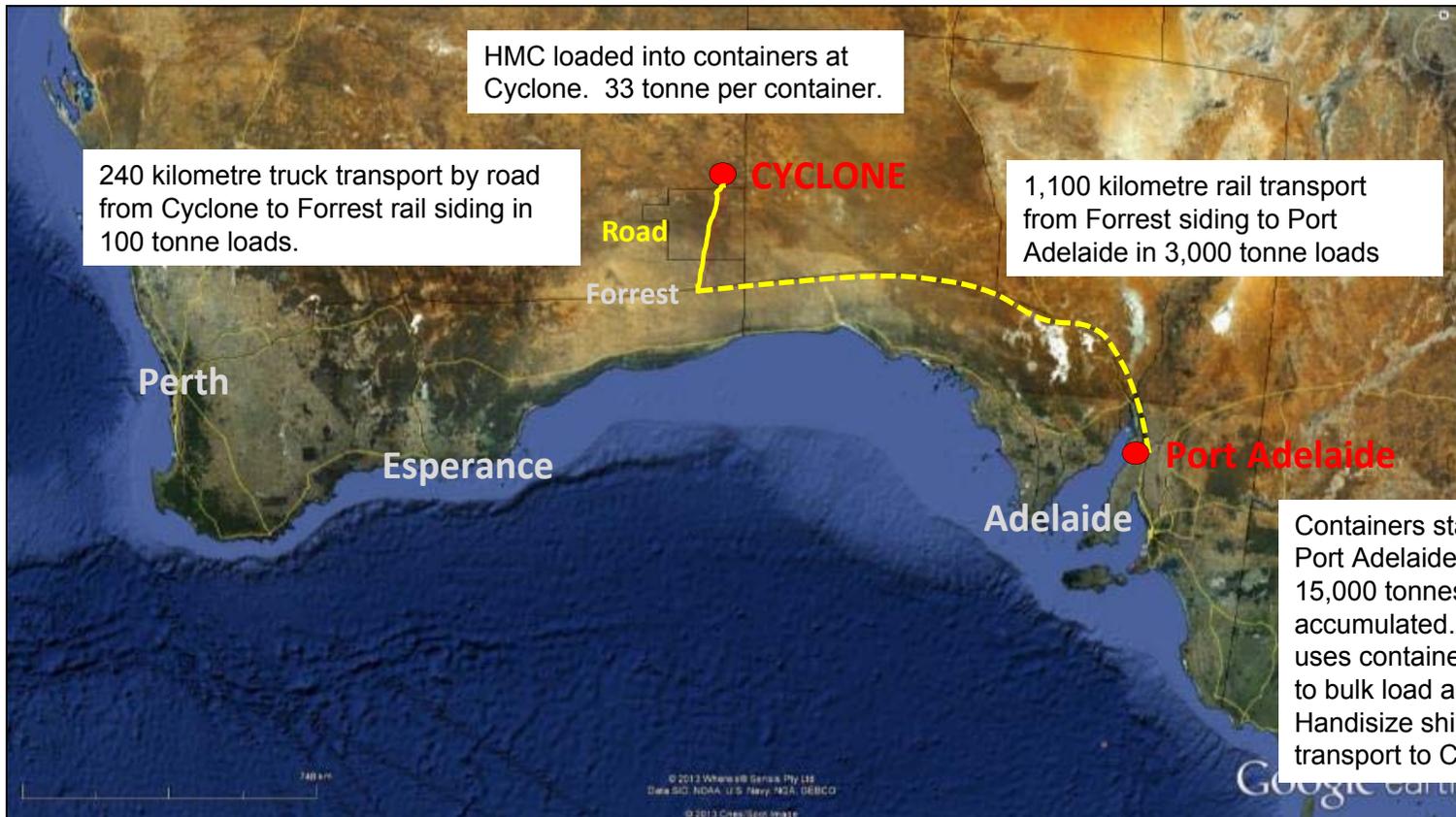


- Mining Lease M69/141 was granted Nov 2014 for the Cyclone Ore Reserve (red) and the operational activities that will occur around it. These activities include wet concentrating, tailings disposal, HMC stockpiles, offices, workshops, infrastructure and services.
- Cyclone Extended (pink) is secured under a Mineral Retention Licence (R69/1).
- Miscellaneous Licence L69/26 for the site access road, accommodation camp, airstrip, and borefield was granted in July 2016.
- Implementation of the mining project and associated activities including the proposed haul road have all been approved by the WA Minister for Environment.

PROPOSED MINING METHOD



MINERAL TRANSPORT DETAILS



MINING PROPOSAL

Mining & Logistics	
Strip Ratio	1 : 1
Mining Rate (Dry)	1,300 tonnes per hour – 2 x Dozer traps
Wet Concentrator Plant Product	20 Tonnes / Hour HMC production 144,000 tpa @ 96% HM Concentrate
Transport - Road	240km - 100 tonne loads to Forrest
Transport - Rail	1,100km – 3,000 tonne loads to Port Pirie
Project Development Options	
Mineral Separation Plant in Australia – Final products from Australia	
Mineral Separation Plant in China or other country	
Direct sale of HMC within Australia	
Direct sale of HMC offshore	

PROPOSED PROJECT TIMELINE



Milestone	Date
Pre-Feasibility Study	March 2012 - Completed
Definitive Feasibility Study	November 2018 - Completed
Project Financing/Partner Entry	Q1/2/3 - 2019
Construction & Development	2019/20
Mining & Production	Q 1/2 - 2021



PRODUCTS

AVERAGE ANNUAL PRODUCTION and PRODUCT QUALITY



ZIRCON	65,000 tonnes	ZrO2 %	FE2O3 %	SiO2 %	Al2O3 %	TiO2 %	P2O5 %	U+Th ppm	CeO2 %
		66.0	0.10	32.8	0.20	0.31	0.07	369	0.020

HiTi87	10,000 tonnes	TiO2 %	FE2O3 %	SiO2 %	Al2O3 %	ZrO2 %	MgO %	MnO %	CaO %	CR2O3 %	U+Th ppm
		86.6	2.6	5.0	1.01	3.3	0.04	0.02	0.03	0.06	84

HiTi67	46,000 tonnes	TiO2 %	FE2O3 %	SiO2 %	Al2O3 %	ZrO2 %	MgO %	MnO %	CaO %	CR2O3 %	U+Th ppm
		67.3	20.1	6.3	1.75	0.5	0.10	0.42	0.07	0.08	94

PROJECT FUNDAMENTALS



- **All primary project approvals in place**
Mining Lease, TO Agreements, Environmental Approvals.
- **Sufficient reserves to support a long mine life**
Currently 14 years at 10Mt pa
Strand mineralisation gives options for high grading
Substantial resource base to support potential long term expansion
- **Support of Traditional Owners to develop project**
Strong relationship, mining agreement signed
- **No competing land use**
Quaternary dune field, Great Victoria Desert

ENFI DFS - SNAPSHOT NUMBERS



Financial Results & Data (AUD\$)

Net Present Value	\$113.3m
Internal Rate of Return	27.2%
Payback period (production years)	2.7 years
Construction Capital (capex)	\$135.7m
Average Annual Revenue	\$130.1m
Average Annual operating expenditure (opex)	\$75.5m
Working Capital *	\$11.7m in Year 1
Sustaining Capital *	\$18.7m (\$10.2m in Year 1)
Average Annual Company Tax (30%)	\$11.6m
Average Annual After-Tax Profit	\$26.6m
Average Annual Depreciation	\$9.9m
Average Annual State Royalty	\$6.5m

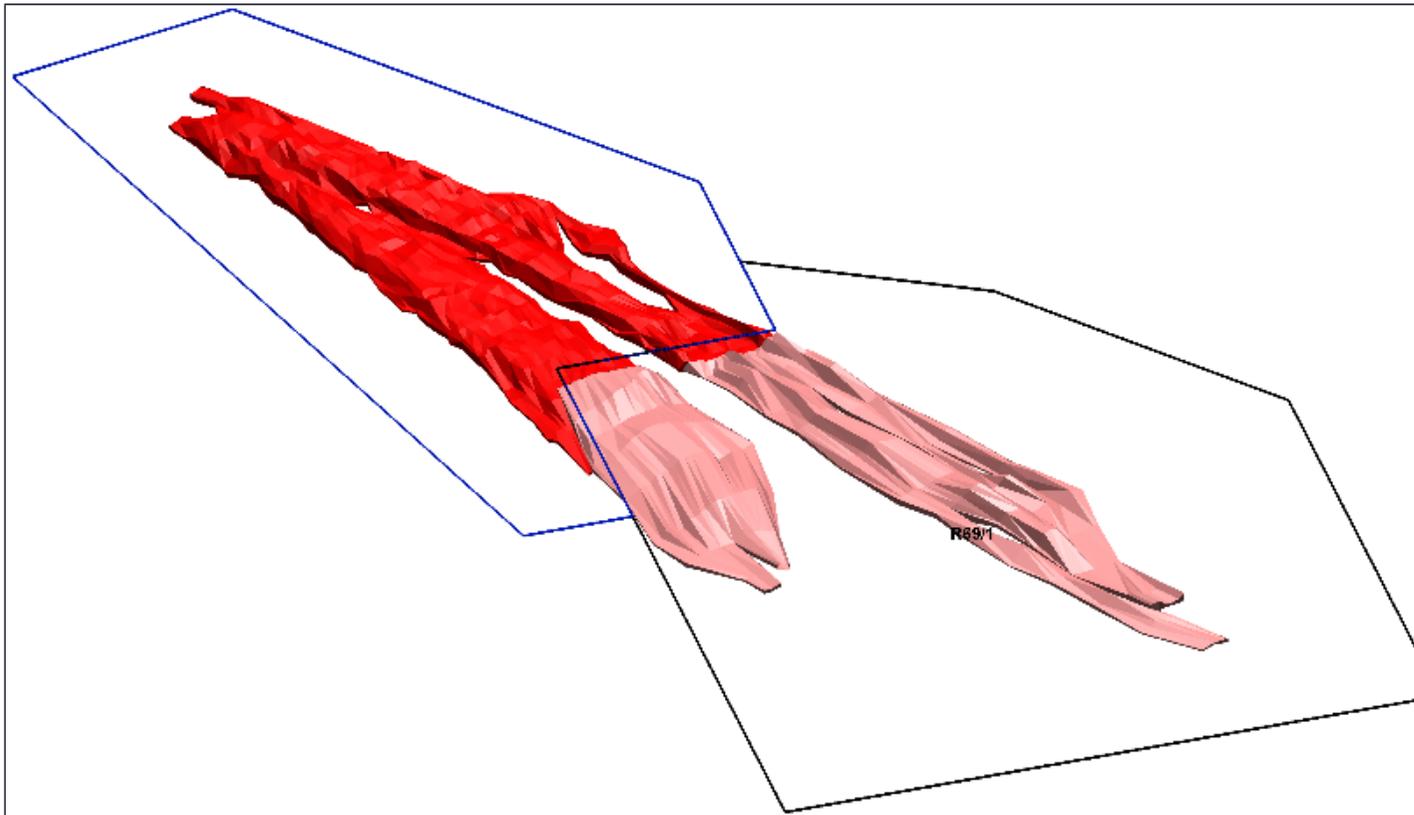
Base DFS Assumptions

USD:AUD Exchange Rate	0.735
CNY:USD Exchange Rate	6.8
Financial Model Discount Rate	10%
HMC Product Price	85% of final product value
Study accuracy	15%
Contingency	10%
Mining Rate	10 million tonnes per annum (Mtpa)
HMC Annual Production Rate	147,700 tonnes (average)
Mine life	13.2 years
Construction period	2 years

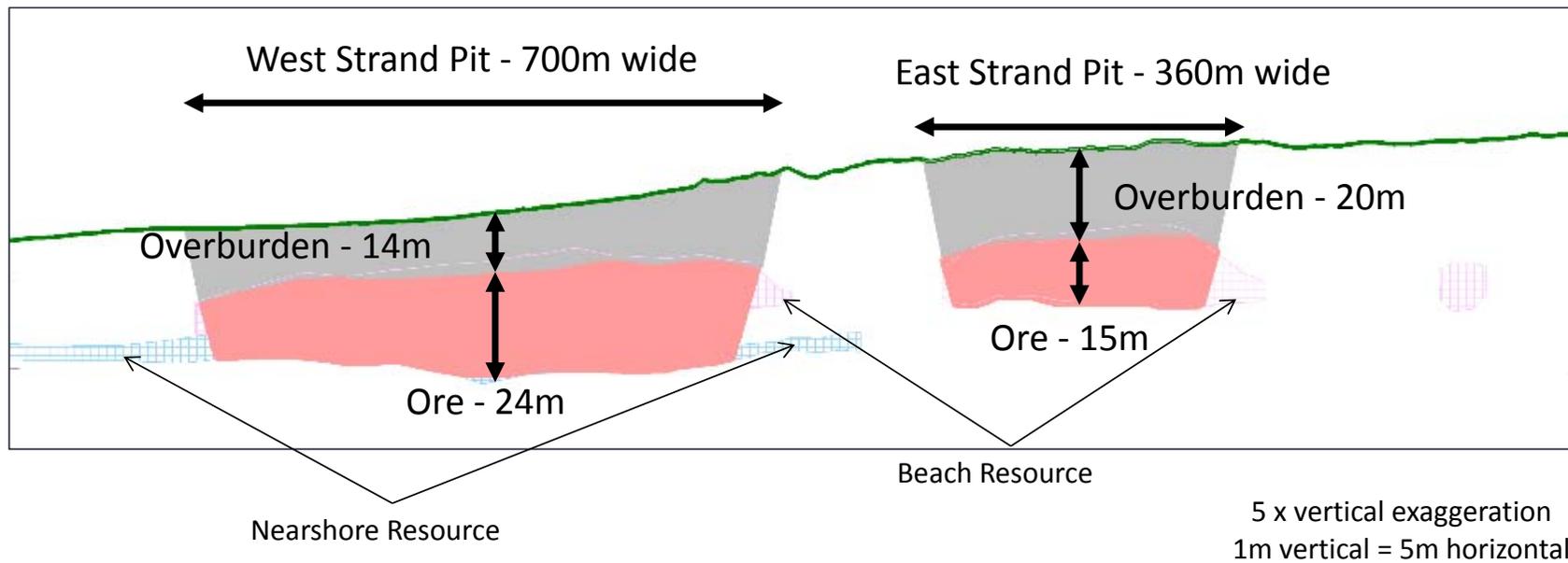
Refer to ASX Release 15 Nov 2018 - all material assumptions underpinning the DFS results in that announcement continue to apply and have not materially changed

- **Positive after-tax financial results, including estimated net present value (NPV) of \$113 million, internal rate of return (IRR) of 27% and capital payback (post-production) in 2.7 years**
- **Capital cost slashed to \$135m a significant reduction on the previous independent estimate in 2016**
- **Life of Mine (LOM) production of 1.94 million tonnes (Mt) of heavy mineral concentrate (HMC), containing 936 kilotonne (kt) zircon, producing 772kt of zircon final product**
- **ENFI, part of major SOE Chinese mining group China Minmetals, formally endorses the Cyclone project and recommends immediate development.**

CYCLONE ZIRCON RESOURCE – OBLIQUE VIEW



CYCLONE RESOURCE – TYPICAL CROSS SECTION



SALE OF TICK HILL



Tick Hill, Qld

Now sold to Berkut Minerals Ltd (ASX:BMT)

Consideration at sale – 7,211,539 listed Berkut shares valued at \$565,000
Plus immediate replacement of lodged tenement bonds \$337,000 (cash back to DRX), Shares escrowed 12months.
Standard sale terms ,subject to license transfer and shareholder approvals.

Current Value of BMT shares as at 22/3/19 - \$1,045,673

(refer DRX ASX release dated 12/3/19)

RESOURCE STATEMENT – SILICA SANDS

Galalar Silica Project Inferred Mineral Resource



	Silica Sand (Mm ³)	Resource Area (Mm ²)	Average Thickness (m)	Density (t/m ³)	Silica Sand (Mt)
Total	16.5	0.99	16.7	1.6	26.40

Notes:

It is anticipated that due to the nature of the assessment all of the 99% silica sand volume will be used as product and therefore will be included in the Resource assessment. As such, the estimated in situ volumes are equivalent to “Mineral Resources” as defined by the JORC Code (2012).

In accordance with the JORC Code (2012) the classification of mineral resources is a function of the level of geological knowledge and confidence. With increasing level of geological knowledge and confidence the mineral resources are classified as “Inferred”, “Indicated” and “Measured Mineral Resources”. Both the geological knowledge and the level of confidence are a function of the complexity of the mineral resource and the amount of exploration/investigation carried out.

Available exploration data for the Galalar Silica Project indicates that the sand mass has a relatively uniform lithological composition and its extent and volume can be relatively easily estimated using readily available topographic data sets. Based on available subsurface information and the reliability of the geological model, the calculated mineral resources, as shown in **Table** above, are considered as an in situ “**Inferred Mineral Resource**”.

RESOURCE STATEMENT – MINERAL SANDS

Cyclone Project Resource & Reserve Estimate

MINERAL RESOURCE													
Resource Category	HM cut-off %	Material Mt	HM %	HM Mt	Slime %	OS %	Head Grade						Zircon Kt
							Zircon %	Rutile %	Leuc %	HiTi %	Alt Ilm %	Si TiOx %	
MEASURED	1.0	156	2.4	3.79	4.2	5.1	0.69	0.08	0.17	0.52	0.26	0.55	1,070
INDICATED	1.0	55	1.8	0.99	4.1	4.5	0.36	0.06	0.06	0.50	0.11	0.31	200
TOTAL	1.0	211	2.3	4.78	4.2	4.9	0.60	0.08	0.14	0.51	0.23	0.50	1,270
Mineral Assemblage							27%	3%	6%	23%	10%	22%	
ORE RESERVE													
Reserve Category	Zircon cut-off %	Material Mt	HM %	HM Mt	Slime %	OS %	Head Grade						Zircon Kt
							Zircon %	Rutile %	Leuc %	HiTi %	Alt Ilm %	Si TiOx %	
PROBABLE	0.4	138	2.6	3.52	4.6	5.3	0.72	0.07	0.17	0.59	0.32	0.57	990
TOTAL	0.4	138	2.6	3.52	4.6	5.3	0.72	0.07	0.17	0.59	0.32	0.57	990
Mineral Assemblage							28%	3%	7%	23%	13%	22%	

Notes:

- Refer to DRX ASX Release 15 June 2016 “Cyclone Study Reaffirms Project Profitability” for more detail
- Rounding may generate differences in last decimal place
- A constant SG of 1.7 has been used to derive material tonnes
- Slime refers to material typically <53um
- OS refers to material typically >2mm
- Mineral Assemblage derived from QEMSCAN® analysis
- High Titanium Oxides (HiTi) – Ti-oxides containing 70 - 95% TiO₂, Altered Ilmenite (Alt Ilm) – Ti-oxides containing <70% TiO₂, Siliceous Ti-Oxide (Si TiOx) – Ti-oxides containing >10% silica rich Ti minerals.
- Resources are inclusive of Reserves.

COMPETENT PERSONS



STATEMENT IN ACCORDANCE WITH THE AUSTRALASIAN CODE FOR REPORTING OF EXPLORATION RESULTS, MINERAL RESOURCES AND ORE RESERVES (THE JORC CODE)

The information in this report that relates to Exploration Results and Mineral Resources at the Cyclone and Galalar Silica Projects is based on information compiled by Mr Ian Reudavey, who is a Member of the Australian Institute of Geoscientists and was a full time employee of Diatreme Resources Limited. 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 at the Cyclone Project 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.

The information in this report that relates to Mineral Resources at the Galalar Silica Project is based on information compiled by Brice Mutton from Ausrocks Pty Ltd who has significant experience in Industrial Minerals and Quarry Resource assessments. Brice Mutton has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity for which he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code).

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