ASX AND MEDIA RELEASE
8 JUNE 2021

KMS SIGNS BINDING OFFTAKE FOR ZIRCON CONCENTRATE

- 170,000 tonnes of zircon concentrate per year for five years contracted
- Counterparties are three major zircon concentrate processors based in China
- Combined with the Yansteel LTR ilmenite offtake contracts for ~ 80% of Stage 1 revenue are in place

Sheffield Resources Limited ("Sheffield" or **"the Company") (ASX: SFX)** is pleased to announce that Kimberley Mineral Sands (KMS) has signed amendments to three zircon/zircon concentrate offtake agreements (Agreements) previously entered into by Sheffield. The amended Agreements combined are for the future sale of 170,000 per year of zircon concentrate from the Thunderbird Project (Thunderbird). The counterparties are major zircon concentrate processors based in China.

The amended contracts represent ~75% of the total zircon concentrate volume from Stage 1. Combined with the Life of Mine LTR ilmenite offtake agreement agreed with Yansteel, KMS has secured offtake contracts for approximately 80% of the revenue from Stage 1 and expects this to fulfill the offtake requirements for the Thunderbird project financing facilities.

Key terms of the three amended agreements include:

- A minimum contract volume of 170,000 tonnes of zircon concentrate annually for an initial five-year period, with annual contract extensions thereafter;
- Take or pay provisions for the minimum contracted volume;
- Pricing linked to the ZrO_2, TiO_2 and other saleable product content of the concentrate;
- Conditions precedent include a positive final investment decision;
- Agreed product specifications within defined parameters;
- Shipment schedule and delivery obligations agreed between the parties;
- CIF Incoterms;
- Customary payment and product logistics terms included; and
- Force Majeure and other customary commercial arrangements.

TZMI have recently completed a market study for KMS and have estimated a current price (2021 annual average) of US$672/t CIF and a long term (2024) price of US$706/t CIF for the Thunderbird Zircon Concentrate based upon TZMI's price forecast for zircon, TiO_2 minerals and other saleable products.

Sheffield's Executive Chairman, Bruce Griffin, said "Sheffield is pleased with the support shown by existing zircon customers for the Thunderbird Project. KMS has approximately 75% of its zircon concentrate for Stage 1 under binding agreements with three respected and well-established zircon concentrate processing groups."

"KMS are seeing strong demand for the Thunderbird zircon concentrate product and they are engaged with additional counterparties seeking offtake agreements for the ~50,000 tonnes of remaining uncontracted zircon concentrate from Stage 1. With sufficient offtake in place to satisfy the expected project financing requirements, KMS expects to contract the remaining zircon concentrate offtake contracts throughout the period up to the completion of construction at Thunderbird."

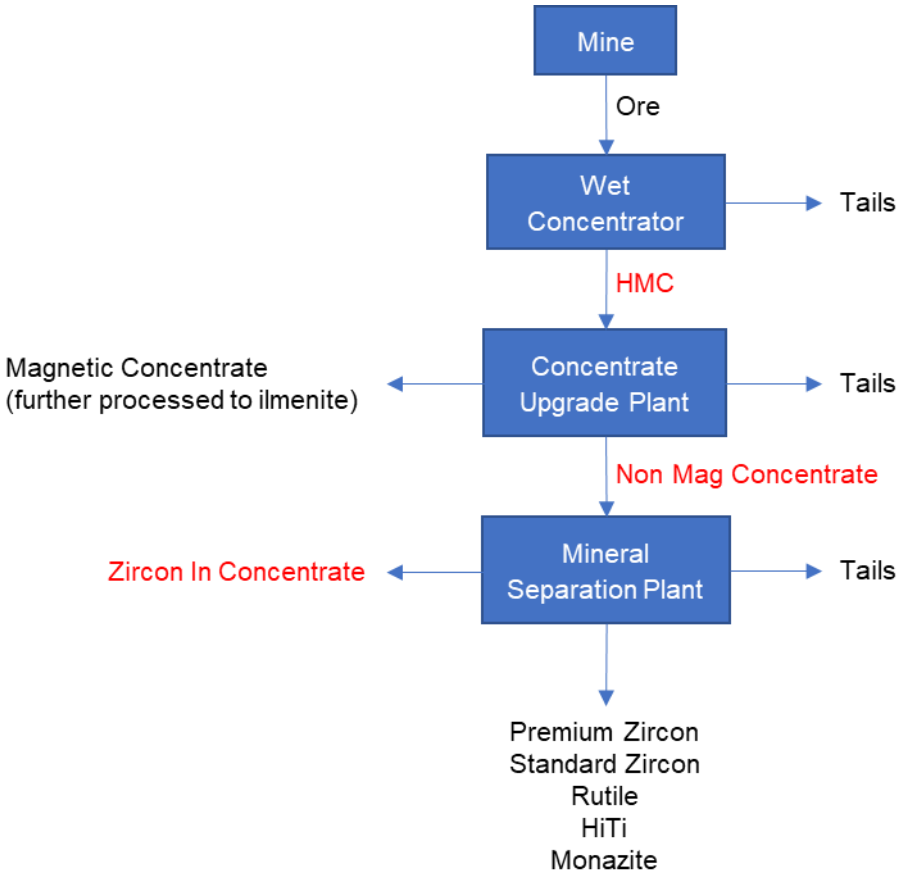
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Mineral Sands Concentrate Market

There are a variety of different zircon containing concentrates sold by mineral sands producers including Heavy Mineral Concentrate (HMC), non-magnetic concentrate (Zircon or Non-Mag Concentrate) and zircon in concentrate (ZIC). These concentrates arise from different stages of mineral sands processing and therefore have different mineral compositions and values.

The figure shows a stylised flowsheet for a typical mineral sands operation making final products. The three main types of concentrates that are typically sold are shown in red.



The ore which will contain between 3% and 20% heavy mineral is first concentrated in the wet concentrator. Primarily using gravity, the wet concentrator separates the heavy mineral from quartz sand resulting in a HMC containing around 90% Heavy Mineral. The HMC is a mixture of valuable (e.g., zircon and ilmenite) and trash heavy minerals.

The HMC is then separated using magnetic separators into magnetic and non-magnetic concentrates in the concentrate upgrade plant. The magnetic concentrate is then typically further processed into ilmenite.

The non-magnetic concentrate is then either sold to a specialist processor or split into final products in the Mineral Separation Plant (MSP). During this separation process, some zircon containing streams that cannot be economically processed into final products (e.g., zircon and rutile) in the MSP are also produced. These streams, typically referred to as ZIC, can be sold to others for further processing to final products. The recoveries and quality of final products from ZIC is typically lower than that for Mineral Separation Plant.

Mineral Sand Concentrate Processing

Over the past 10 to 15 years, a large mineral sands concentrate processing industry has developed. The processors initially focussed on ZIC from operations with a full MSP. Over time the processors have processed increasing amounts of zircon concentrate (also referred to as non-magnetic concentrate) and HMC. Concentrates are now the largest single source of zircon imports into China; the largest market for zircon globally. Currently around 800,000 tonnes per annum of concentrates are processed in facilities that are not owned by the operator of the mineral sands operation where the originated from.

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The processors utilise similar equipment to a typical MSP but often have smaller individual units and higher recirculation loads to increase overall recovery of products. They are typically located in countries with capital and operating cost advantages relative to the mine locations and can also take advantage of blending products from multiple concentrates to maximise revenue.

Therefore, the expected IRR of the mineral sands project developer of building their own zircon MSP and selling final products when compared to selling a zircon concentrate to processors is ~15%.

Concentrate Products

Each of the three main potential concentrate products; HMC, ZIC and Zircon (Non-Mag) Concentrate has different mineral contents and expected recoveries and as a result they are valued differently by processors.

Product	Contained Minerals	Value
Heavy Mineral Concentrate (HMC)	Contains 90% Heavy Mineral including Trash Heavy Mineral. Lower value magnetic TiO_2 (ilmenite) has not have been removed	Low
Zircon In Concentrate (ZIC)	Contains harder to recover and lower quality final products and some trash material	Moderate
Zircon (or Non-Mag) Concentrate	Contains zircon, rutile, HiTi and/or monazite and is typically low in trash material and magnetic TiO_2	High

Zircon (or Non-Mag) is the highest value concentrate as it contains the most valuable non-magnetic products and is lower in trash.

ZIC is typically lower value as most of the highest value products have already been extracted leaving only lower quality and harder to recover minerals for the processor. HMC is typically the lowest value as it contains larger quantities of trash material as well as a higher proportion of lower value magnetic TiO_2 products.

Zircon (Non-Mag) Concentrate Pricing

The price a processor will pay for a zircon concentrate depends on the saleable products that can be recovered, the market price of those products adjusted for quality, the cost of processing and the processor margin. The price is calculated as a $/% mineral with different values for zircon, magnetitic TiO_2 (ilmenite), non-magnetic TiO_2 (rutile and HiTi) and other saleable products.

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The price of Thunderbird zircon concentrate is weighted to zircon which represents ~84% of the forecast price.

This announcement was authorised for release by the Company's Board of Directors.

Sheffield Resources LIMITED

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For further information please contact:

Bruce Griffin
Executive Chairman
Tel: +618 6555 8777
info@sheffieldresources.com.au
Website:
www.sheffieldresources.com.au

Mark Di Silvio
CFO/Company Secretary
Tel: +618 6555 8777

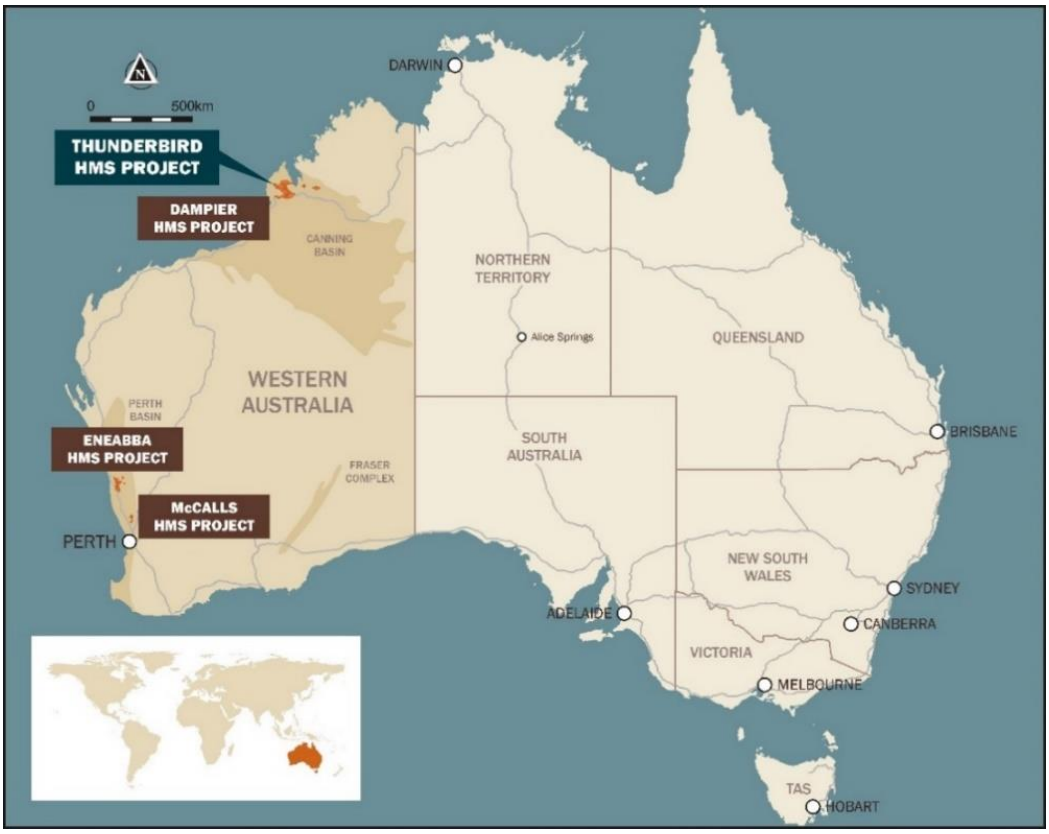


Figure 1: Location of Thunderbird Mineral Sands Project

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ABOUT SHEFFIELD RESOURCES

Sheffield Resources Limited is focused on developing the world class Thunderbird Mineral Sands Project, located in north-west Western Australia. Sheffield continues to assess other regional exploration opportunities.

ABOUT YANSTEEL

Yansteel is a wholly-owned subsidiary of Tangshan Yanshan Iron & Steel Co., Ltd, a privately owned steel manufacturer headquartered in Hebei, China producing approximately 10mt per annum of steel products and has annual revenues of ~A$6bn.

Construction of a 500ktpa integrated titanium dioxide processing facility including a titanium slag smelter has commenced by the company. This complex will consume the Low Temperature Roast ("LTR") ilmenite offtake from Stage 1 of the Thunderbird Mineral Sands Project.

THUNDERBIRD MINERAL SANDS

Thunderbird is one of the largest and highest grade mineral sands discoveries in the last 30 years. Sheffield's 2019 Bankable Feasibility Study Update shows Thunderbird is a technically low risk, modest capex project that generates strong cash margins from globally significant levels of production over an exceptionally long mine-life spanning multiple decades.

Thunderbird will generate a high-quality suite of mineral sands products with specifications suited to market requirements. These products include a zircon products and ilmenite suitable for manufacturing titanium dioxide pigment or smelting into chloride slag.

Thunderbird is located in one of the world's most attractive mining investment jurisdictions and is well placed to deliver long term, secure supply of high quality products to a range of potential customers.

KIMBERLEY MINERAL SANDS

In January 2021, Sheffield and Yansteel executed binding agreements for the formation of a 50:50 Joint Venture (Kimberley Mineral Sands Pty Ltd, KMS) to own and develop the Thunderbird Mineral Sands Project and adjacent tenements on the Dampier Peninsula. The parties have agreed that the development concept for Stage 1 of the Project will be a 10.4mt per annum mine and process plant producing a zircon rich non-magnetic concentrate and LTR ilmenite.

Yansteel subscribed for a 50% interest in KMS and provided A$130.1m in project equity funding. Sheffield shall fund any project equity shortfall between A$130.1m and A$143m, less Project costs incurred prior to a Final Investment Decision ("FID"). KMS will secure project finance and, if required, project equity in excess of A$143m will be funded 50:50 by Yansteel and Sheffield. The Yansteel A$130.1m project equity investment in KMS, together with the A$12.9m funding under the Yansteel Share Placement completed on 12 August 2020 and combined with existing project financing is expected to deliver a fully funded project.

KMS is governed by a four person Board of Directors with Sheffield and Yansteel each nominating two directors. Key Joint Venture decisions require unanimous approval of both shareholders. KMS operates as a standalone entity with its own management and employees.

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FORWARD LOOKING AND CAUTIONARY STATEMENTS

The contents of this report reflect various technical and economic conditions at the time of writing. Given the nature of the resources industry, these conditions can change significantly over relatively short periods of time. Consequently, actual results may vary from those contained in this report.

Some statements in this report regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "scheduled", "intends", "anticipates", "believes", "potential", "predict", "foresee", "proposed", "aim", "target", "opportunity", "could", "nominal", "conceptual" and similar expressions. Forward-looking statements, opinions and estimates included in this report are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements are provided as a general guide only and should not be relied on as a guarantee of future performance. Forward-looking statements may be affected by a range of variables that could cause actual results to differ from estimated results and may cause the Company's actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward-looking statements. So there can be no assurance that actual outcomes will not materially differ from these forward-looking statements.

PREVIOUSLY REPORTED INFORMATION

This announcement should be read in conjunction with previously reported information. Information previously reported or extracted from the Company's previous ASX announcements include:

- Mineral Resource and Ore Reserve Statement: "MINERAL RESOURCE AND ORE RESERVE STATEMENT" 24 September 2019
- Thunderbird Ore Reserve Update: "THUNDERBIRD ORE RESERVE UPDATE" 31 July 2019
- Thunderbird BFS Update: "BFS UPDATE MATERIALLY REDUCES CAPITAL", 31 July 2019

These announcements are available to view on Sheffield's website www.sheffieldresources.com.au.

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