

## SHEFFIELD COMMENCES 8,000m REGIONAL DRILLING PROGRAM AT THUNDERBIRD

Sheffield Resources Limited (“Sheffield”, “the Company”) (ASX: SFX) is pleased to advise that it has commenced a major exploration drilling program at its Dampier Mineral Sands Project near Derby in northern Western Australia.

The aircore drilling program targets multiple prospects along a 160km long prospective horizon. The program is expected to take two months and generate assay results progressively over the coming months.

The Company has commenced drilling at the high priority Night Train prospect located 20km southeast of Thunderbird and within 2km of the proposed Thunderbird Access Road. Significant results from previous work at Night Train include:

- 9m @ 6.33% HM from 22.5m (DAAC052), including 7.5m @ 7.23% HM from 24m
- 13.5m @ 5.25% HM from 46.5m (DAAC094), including 7.5m @ 8.23% HM from 48m
- 24m @ 3.33% HM from 37.5m (DAAC093), including 12m @ 5.48% HM from 37.5m
- Mineral assemblage: 15% zircon, 16% ilmenite, 53% leucoxene and 8% Hi-Ti leucoxene
- Scoping metallurgical test work indicates ceramic grade zircon specifications can be produced

(refer to ASX announcements of 25 February 2015, 22 September 2015 and 14 April 2016 for further details)

This drilling program forms part of Sheffield’s exploration strategy of targeting additional large, zircon rich deposits containing premium ceramic grade zircon suitable for downstream processing at the Thunderbird Dry Mineral Separation Plant.

Sheffield’s Managing Director, Bruce McFadzean, said:

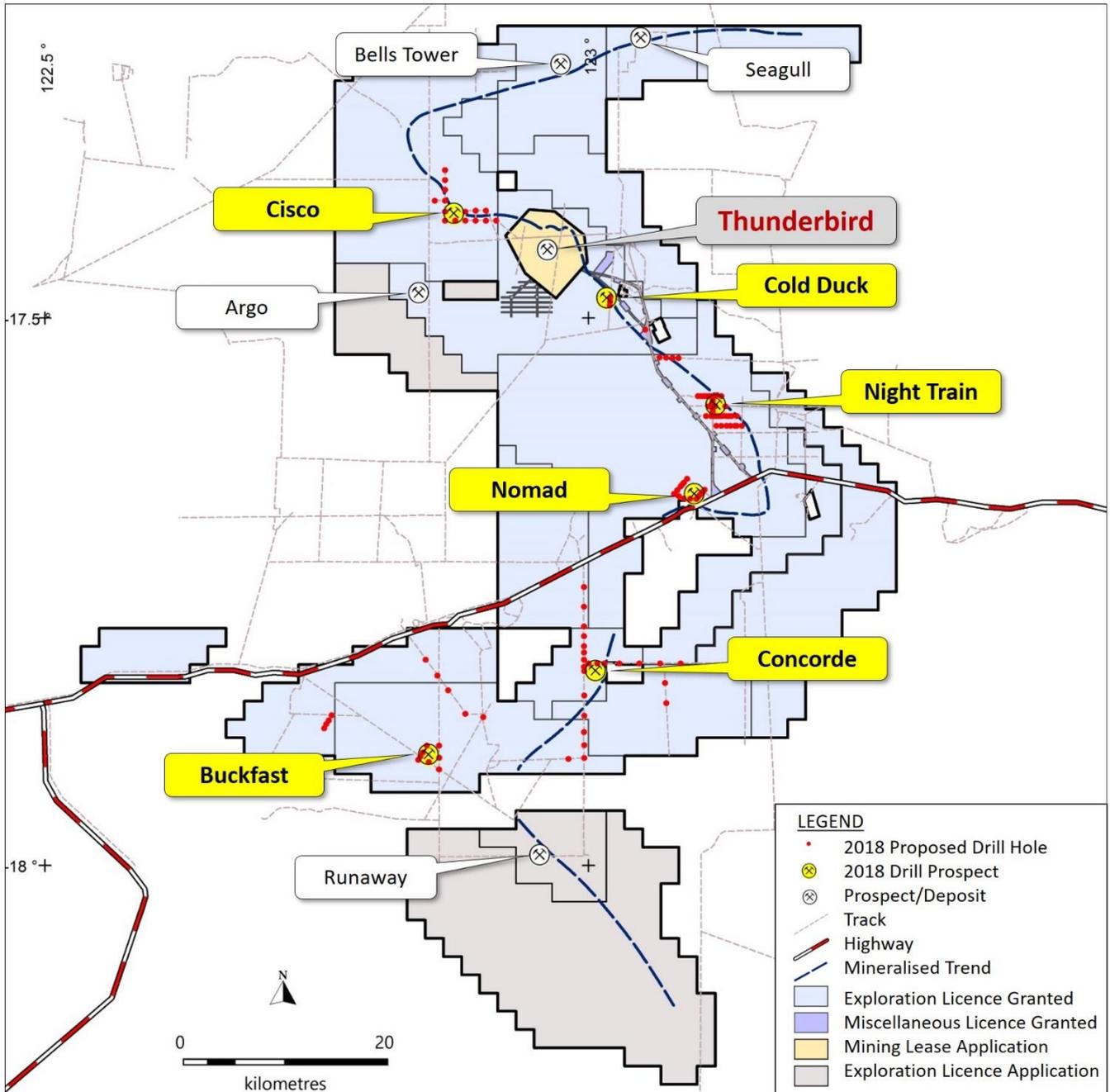
*“We are true believers in the Canning Basin as a significant new mineral sands province. We have a dominant ground position in a highly underexplored region with immense potential.*

*“We are looking for large zircon rich deposits to complement our Thunderbird Mineral Sands Project, one of the largest and highest-grade mineral sands discoveries in the last 30 years. We are planning an extensive drilling program, which could generate significant potential upside for investors.*

*“With clear long-term supply issues facing the industry and very few recent discoveries, Sheffield remains committed to aggressively growing its inventory of zircon rich Reserves and Resources. We will continue to actively pursue and evaluate new mineral sands opportunities in Australia and overseas, with a focus on large zircon rich deposits.”*



Figure 1: First drill hole at Night Train for 2018



**Figure 2: Proposed drill hole and prospect location plan**

The Thunderbird regional drilling program will commence at the zircon rich Night Train prospect, then move to prospects with known mineralisation (Cold Duck, Nomad, and Buckfast) and targets located up dip of existing drill intersections (Cisco and Concorde). In addition, a number of regional traverses will be completed with the aim of identifying mineralisation higher in the stratigraphy, including potential strandline style mineralisation.

At the East Derby project Sheffield is investigating the potential for the prospect to yield commercial quantities of sand for construction purposes. Drilling will be undertaken to better define the potential quantities of these sands, along with additional test work designed to assess suitability for specific end-use requirements.

Results including assays, mineral assemblage test work and geotechnical test work will be reported progressively during Q3 and Q4 2018.

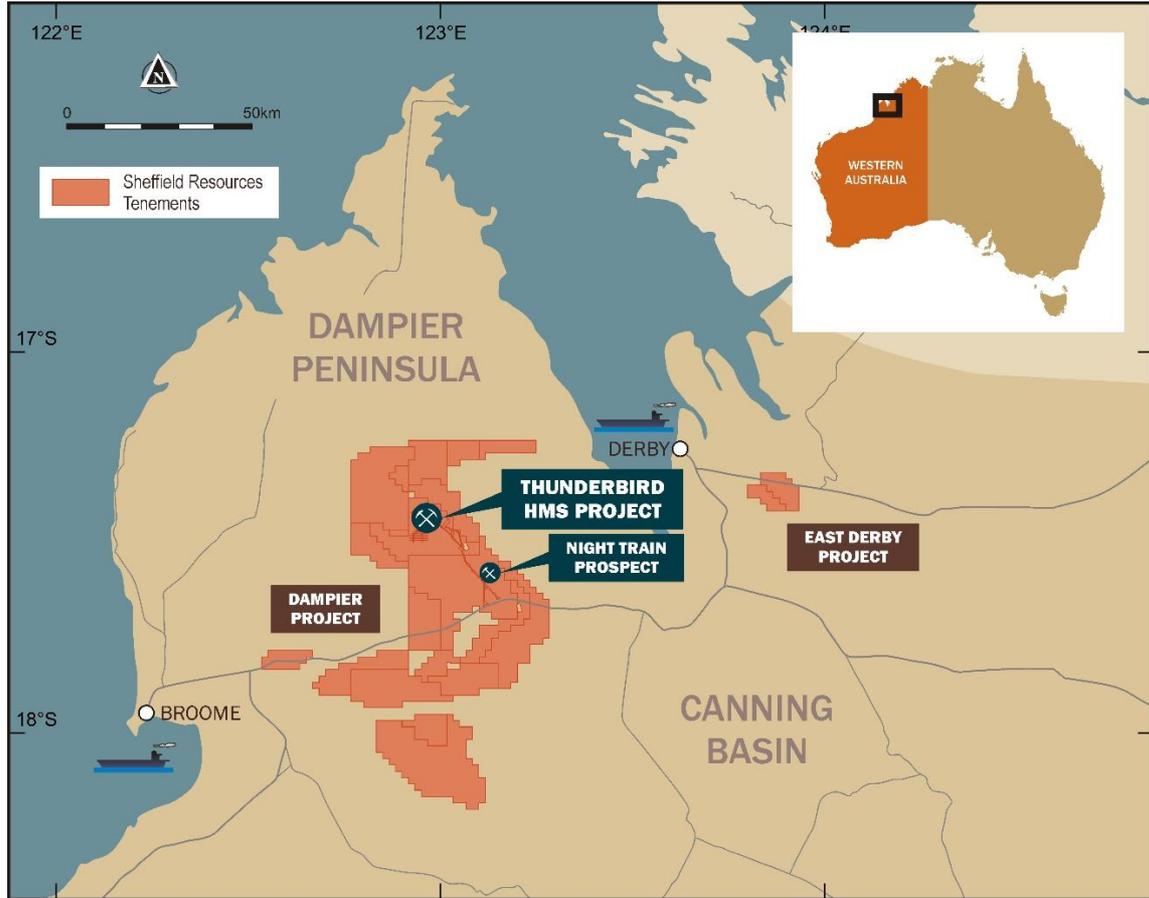
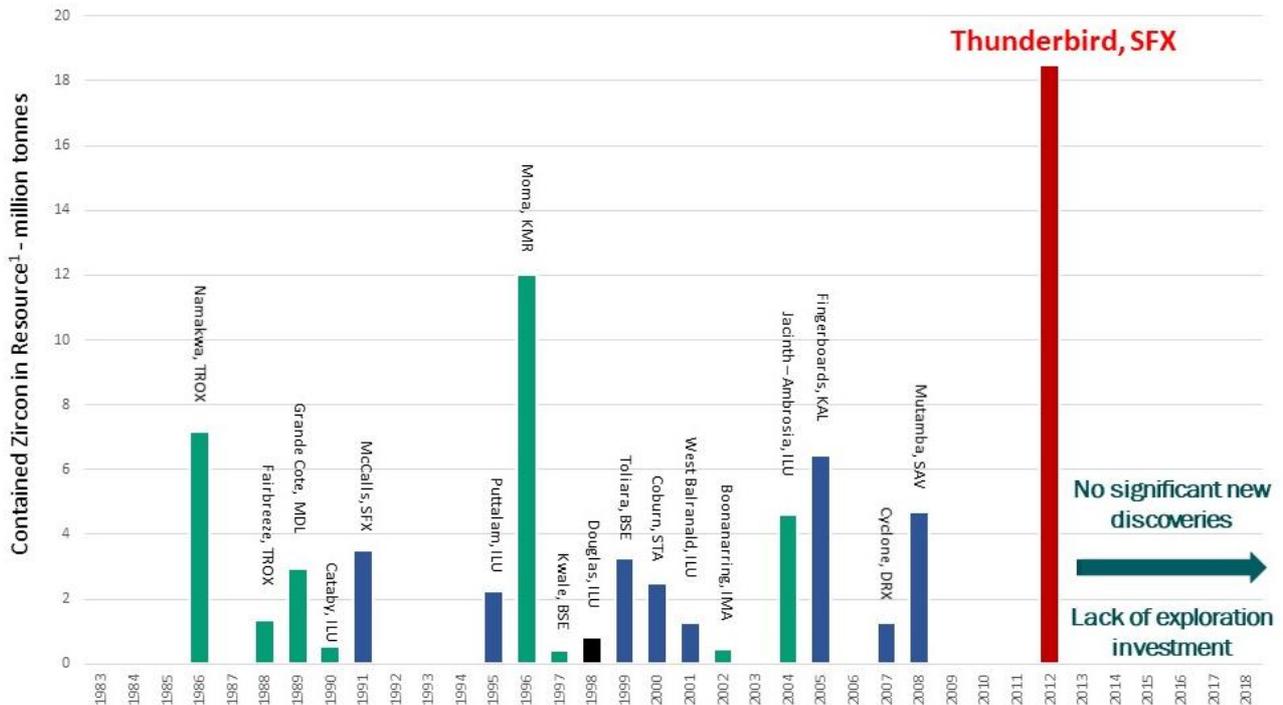


Figure 3: Location of Thunderbird Mineral Sands Project



<sup>1</sup>Thunderbird Mineral Resource as published on the ASX on 5 July 2018. Thunderbird Mineral Resource ranked against published pre-production Mineral Resources of current mineral sands operations and projects > 2Mt tonnes contained zircon plus selected deposits < 2Mt contained zircon under investigation globally. Data compiled by Sheffield from public sources. BLUE - projects yet to be developed, GREEN - projects in development/production, BLACK - projects mined out, RED - Thunderbird

Figure 4: Discovery timeline for significant zircon deposits.  
(refer to ASX announcements of 16 July 2018)

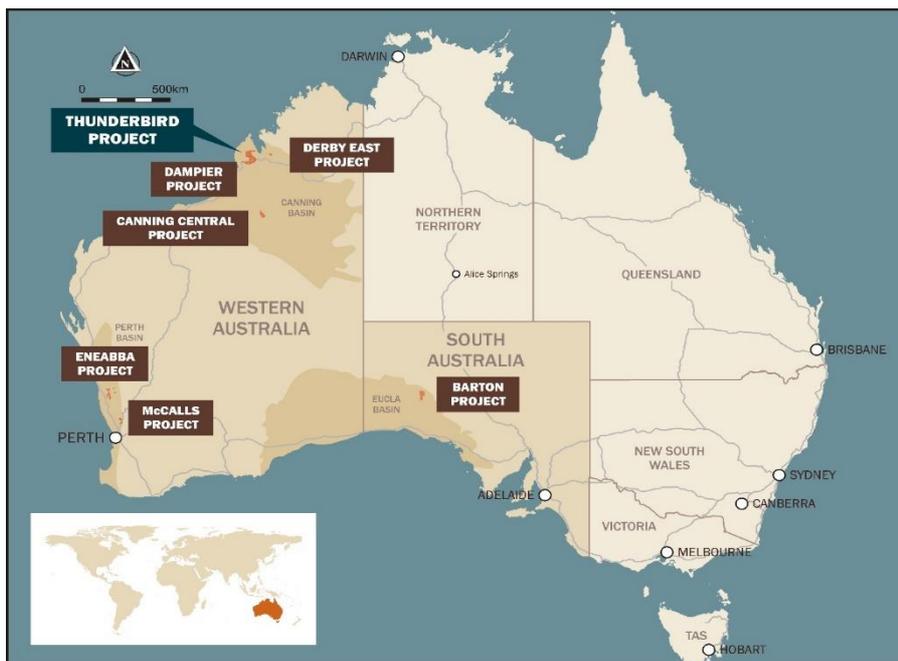


Figure 5: Location of Sheffield Mineral Sands Projects



Figure 6: Sheffield field crew at Night Train

ENDS

For further information please contact:

Bruce McFadzean  
 Managing Director  
 Tel: 08 6555 8777

[info@sheffieldresources.com.au](mailto:info@sheffieldresources.com.au)

Website: [www.sheffieldresources.com.au](http://www.sheffieldresources.com.au)

Follow us:

[@Sheffield\\_ASX](https://twitter.com/Sheffield_ASX) [LinkedIn](https://www.linkedin.com/company/sheffieldresources)

Media: Yvonne Ball  
 Citadel-MAGNUS  
 Tel: +61 448 232 398  
[yball@citadelmagnus.com](mailto:yball@citadelmagnus.com)

## COMPLIANCE STATEMENTS

The information in this report that relates to Exploration Results is based on information compiled by Mr David Archer, a Competent Person who is a Member of Australian Institute of Geoscientists (AIG). Mr Archer is a full-time employee of Sheffield Resources Ltd and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Archer consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## PREVIOUSLY REPORTED INFORMATION

This report includes information that relates to Ore Reserves, Mineral Resources and Pre-Feasibility Study results which were prepared and first disclosed under the JORC Code 2012. The information was extracted from the Company's previous ASX announcements as follows

- Investor Presentation: "INVESTOR PRESENTATION", 16 July, 2018
- Night Train metallurgical scoping results: "PREMIUM ZIRCON AT NIGHT TRAIN", 14 April, 2016
- Night Train Discovery: "NEW MINERAL SANDS DISCOVERY AT NIGHT TRAIN" 22 September, 2015
- Regional drilling results: "THREE NEW MINERAL SANDS DISCOVERIES IN CANNING BASIN" 25 February, 2015

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of reporting of Ore Reserves, Mineral Resources and results of Prefeasibility Studies that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement.

## FORWARD LOOKING AND CAUTIONARY STATEMENTS

Some statements in this report regarding estimates or future events are forward-looking statements. They involve risk and uncertainties that could cause actual results to differ from estimated results. Forward-looking statements include, but are not limited to, statements concerning the Company's exploration programme, outlook, target sizes and mineralised material estimates. They include statements preceded by words such as "anticipated", "expected", "targeting", "likely", "scheduled", "intends", "potential", "prospective" and similar expressions.

## ABOUT SHEFFIELD RESOURCES

Sheffield Resources Limited is focused on developing its 100% owned, world class Thunderbird Mineral Sands Project, located in north-west Western Australia. Sheffield continues to also assess other regional exploration opportunities.

## THUNDERBIRD MINERAL SANDS

Thunderbird is one of the largest and highest grade mineral sands discoveries in the last 30 years.

Sheffield's Bankable Feasibility Study 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 of 42 years.

Thunderbird will generate a high-quality suite of mineral sands products with specifications suited to market requirements. These products include Premium Zircon suitable for the ceramic sector and LTR Ilmenite which will be one of the highest-grade sulfate feedstocks available globally.

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.

Subject to permitting activities, the Company is targeting initial production in 2020. The initial planned production profile is aligned with expected emerging supply gaps in global mineral sands markets.

ASX Code:	SFX	Market Capitalisation:	A\$204m
Issued shares:	229.0m	Cash (unaudited, 30 June 2018):	A\$23.1m