



ASX and Media Release

5 October 2011

DRILLING COMMENCES ON PILBARA IRON PROJECT

KEY POINTS

- **Initial RC drilling programme to test five high grade DSO targets at Three Pools**
- **Exploration Target of between 20 and 60 million tonnes at 58% to 64% Fe¹**
- **Three Pools is located in a region of intense iron ore exploration and development activity**

Bulk minerals explorer Sheffield Resources ("Sheffield") (ASX:SFX) advises that, following the successful completion of aboriginal heritage surveys, drilling has commenced at its Three Pools iron ore project 20km north of Newman in Western Australia's eastern Pilbara (Figure 1).

The RC drill programme of approximately 2,000m will provide an initial test of five substantial zones of iron mineralisation mapped and sampled by Sheffield's geologists.

Based on the results of mapping and sampling to date (70 rock chip samples averaging 61.89% Fe), the Company considers the Three Pools project to contain an **Exploration Target** of between **20 and 60 million tonnes at 58% to 64% Fe¹** (refer to ASX release of 27 July for further details).

The iron mineralisation at Three Pools is associated with both the Boolgeeda Iron Formation and a banded iron formation within the Wongarra Volcanics. The Boolgeeda Iron Formation is known to host several significant iron deposits in the Pilbara including Atlas Iron's (ASX:AGO) Hickman and McCamey's North discoveries.

Three Pools is situated just 6km from the Rio Tinto–Hancock JV's \$1.5 billion Hope Downs 4 project, currently in development.

Three Pools is also proximal to Brockman Resources Ltd's (ASX:BRM) Coondiner, Kalgan Creek and Ophthalmia Range projects from where Brockman recently announced DSO grade sample results (BRM: ASX release 30 August 2011).

The Pilbara is familiar territory for Sheffield's Board who previously founded successful iron ore explorer Warwick Resources. Warwick had a market capitalisation of \$80 million at the time of its merger with Atlas Iron (current market capitalisation: \$2.3 billion) in 2009.

ENDS

¹ Sheffield has not yet reported Mineral Resources at the Three Pools project and any discussion in relation to targets and Mineral Resources is conceptual in nature. There has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

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COMPETENT PERSONS' STATEMENT

The information in this announcement that relates to exploration results is based on information compiled by David Archer. Mr Archer is a full time employee of the Company. Mr Archer is a Member of the Australasian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and the activity to which they are undertaking to qualify as Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("JORC Code")'. Mr Archer consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

EXPLORATION TARGET STATEMENT

The terms "Direct Shipping Ore (DSO)", "Target" and "Exploration Target", where used in this announcement, should not be misunderstood or misconstrued as an estimate of Mineral Resources and Reserves as defined by the JORC Code (2004), and therefore the terms have not been used in this context. Exploration Targets are conceptual in nature and it is uncertain if further exploration or feasibility study will result in the determination of a Mineral Resource or Reserve.

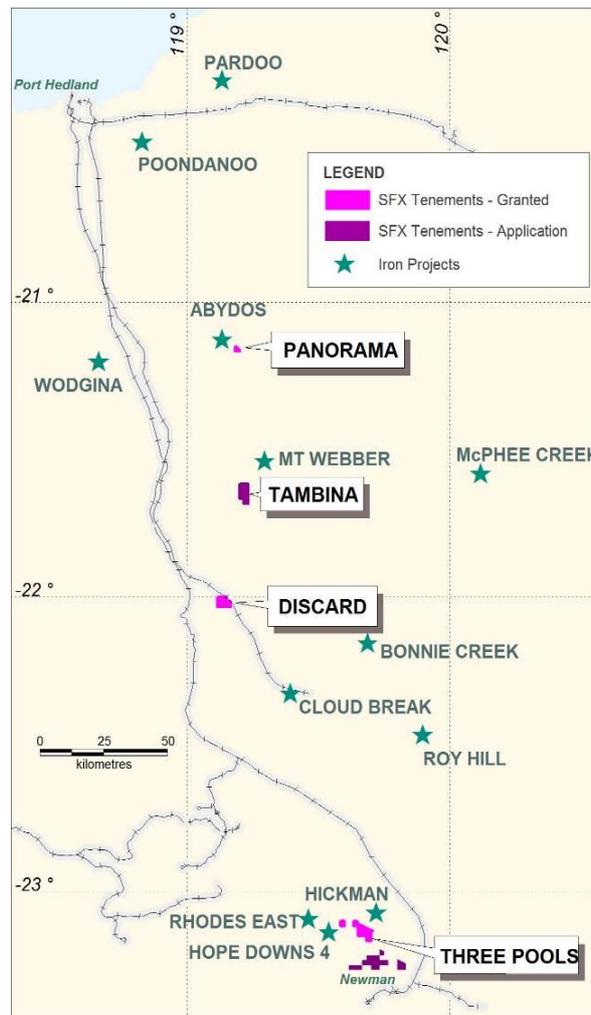


Figure 1: Location of Three Pools project and Sheffield's other DSO projects in the Eastern Pilbara

ABOUT SHEFFIELD RESOURCES

Sheffield Resources Limited (**Sheffield**) is a new exploration company with a bulk minerals focus. The Company's Projects are geared towards the steel industry feed cycle (iron ore and tungsten) and the emerging fillers-ceramics-pigments cycle (talc, zircon, titanium dioxide).

ASX Code – SFX

Market Cap @ 25cps - \$14.7m

Issued shares – 58.7m

Cash - \$4.1 (at 30/6/2011)

The Company has over 6,000km² of highly prospective tenure, all situated within the state of Western Australia.

TALC

Sheffield has 1,152km² of tenure over the 175km-long Moora Talc Belt which represents a dominant ground position over a region that has, for the last 50 years, been exclusively controlled by major mining companies.

The Moora Talc Belt includes the large Three Springs mine which is owned by Imerys subsidiary Luzenac Australia Pty Ltd. Three Springs is renowned for producing high purity talc and is a relatively simple “dig-and-deliver” operation.

The existing infrastructure is excellent. A railway and a sealed highway transect the project and connect to Geraldton port approximately 170km to the northwest.

Sheffield's large tenement holding contains numerous talc occurrences and has the potential to become a strategic talc asset. Sheffield therefore represents a unique opportunity for investors to gain exposure to one of the few high-grade talc explorers in the world.

HEAVY MINERAL SANDS

Sheffield controls over 5,000km² of mineral sands tenure in the established North Perth Basin mineral sands province and the emerging Carnarvon, Eucla and Canning Basin provinces.

The Dampier project, located near Derby in WA's Kimberley region is the most recent addition to Sheffield's heavy mineral sands project portfolio. Dampier is a large scale zircon play formerly explored by Rio Tinto.

Sheffield's North Perth Basin tenement package of over 2,500km² contains seven advanced exploration projects: West Mine North, Ellengail, Yandanooka, Durack, Beekeepers, and Irwin which are located near Eneabba; and the large McCalls deposit - a former BHP project located near Gingin. These projects are well located close to existing mineral sands operations and to a network of highways and railway lines connecting to Geraldton and Fremantle/Kwinana ports. Sheffield's strategy is, subject to exploration success, to build multiple HMS projects capable of supporting a flexible mobile mining plant.

IRON

Sheffield's Pilbara iron ore projects consist of 5 granted tenements and 7 tenement applications, 5 of which are subject to ballot with multiple competing parties. Sheffield's strategy is to target hematite mineralisation adjacent to infrastructure in the world class Pilbara iron province and to build up consolidated tenement holdings over time. High grade iron mineralisation has been identified on three of the Company's tenements.