



## ASX and Media Release

18 December 2012

# FIXED LOOP EM SURVEYS UNDERWAY AT RED BULL Ni-Cu PROJECT

## KEY POINTS

- Fixed Loop EM surveys in progress over 3 high priority VTEM anomalies
- First pass soil sampling survey lines undertaken over 8 targets
- Sheffield employing similar exploration techniques to those Sirius used to discover Nova

Sheffield Resources (“Sheffield”, “the Company”) (ASX:SFX) today announced the commencement of Fixed Loop Transient Electromagnetic (FLTEM) surveys and the completion of first pass soil sampling at its Red Bull Nickel-Copper Project.

The Red Bull project comprises two recently granted tenements with a total area of 525km<sup>2</sup> and is located within 20km of Sirius Resources NL’s (ASX:SIR) recent Nova Nickel-Copper discovery in the newly identified Fraser Range Nickel Province in Western Australia (Figure 3).

The immediate focus of the FLTEM surveys will be three high order EM anomalies (RB\_VA1-3, Figure 1) with coincident magnetic anomalies, identified from the recently completed VTEM airborne electromagnetic survey (see ASX releases dated 28 November 2012 & 13 December 2012). The combination of EM conductors and magnetic anomalies is a strong indicator of mineralised systems.

The FLTEM results and subsequent modelling are expected to provide robust targets very quickly which can then be fast tracked for drilling.

Managing Director, Bruce McQuitty said that Sheffield was moving ahead quickly with its exploration programme at Red Bull.

*“Our on-ground exploration approach is similar to that used by Sirius to discover the Nova deposit. We intend to have drill-ready targets by Q2 2013.”*

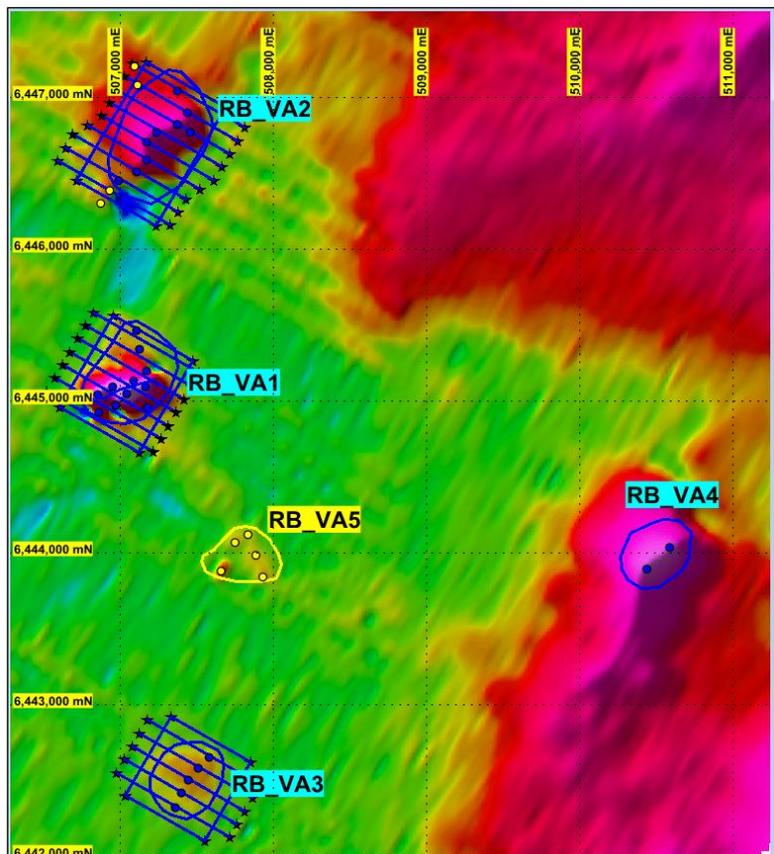


Figure 1: Proposed FLTEM survey arrays over high order VTEM anomalies RB\_VA1-3 (Late Channel B-field VTEM image).



Figure 2: Soil sampling at Red Bull

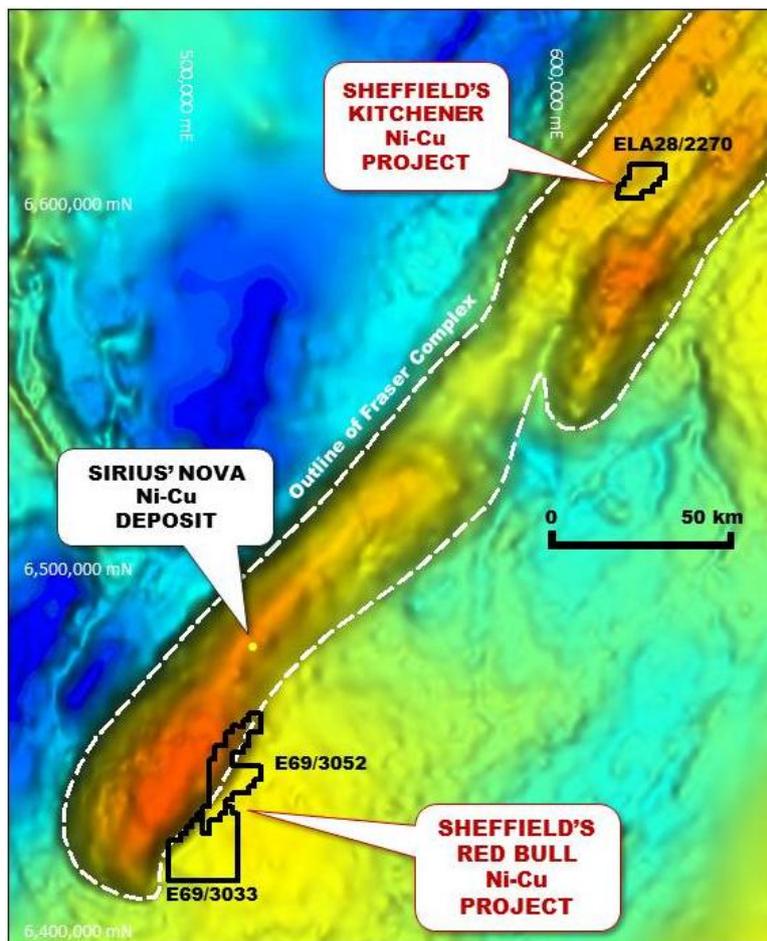


Figure 3: Location of Red Bull Project on a gravity image outlining the Fraser Complex

ENDS

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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.

#### **FORWARD LOOKING STATEMENTS**

Some statements in this announcement 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 "expected", "planned", "target", "scheduled", "intends", "potential", "prospective", "strategy" and similar expressions.

## **ABOUT SHEFFIELD RESOURCES**

Sheffield Resources Limited (**Sheffield**) is a rapidly emerging heavy mineral sands (HMS) company.

ASX Code – SFX

Market Cap @ 49.5cps - \$48.8m

Issued shares – 98.6m

Cash - \$7.3m (at 30/9/2012)

The Company has over 6,000km<sup>2</sup> of highly prospective tenure, all situated within the state of Western Australia.

## **HEAVY MINERAL SANDS**

The Dampier project, located near Derby in WA's Kimberley region, contains the large, high grade zircon-rich Thunderbird HMS deposit.

The Eneabba project comprises multiple HMS deposits and is located near Eneabba approximately 140km south of the port of Geraldton in WA's Mid-West region.

Sheffield is also evaluating the large McCalls chloride ilmenite project, located 110km to the north of Perth.

## **NICKEL-COPPER**

Sheffield's 525km<sup>2</sup> Red Bull project is located in the highly prospective Fraser Complex within 20km of Sirius Resources NL's (ASX:SIR) Nova Nickel-Copper discovery.

## **IRON**

Sheffield has identified iron mineralisation on three of its tenements in the Pilbara iron ore province. Thick hematite mineralisation was intersected in first pass RC drilling at the Three Pools project, 20km north of Newman.