

ASX and Media Release

13 December 2012

FIELD WORK COMMENCED AT RED BULL Ni-Cu PROJECT

KEY POINTS

- **Key project tenement granted, within 20km from Sirius' Nova Deposit in the Fraser Range Nickel Province**
- **VTEM survey finalised – infill lines improve resolution of 4 high order EM anomalies identified from initial survey**
- **Field programmes underway to evaluate several high priority targets**

Sheffield Resources (“Sheffield”, “the Company”) (ASX:SFX) today announced the commencement of field work at its Red Bull Nickel-Copper Project following grant of key exploration licence E69/3052.

The Red Bull project 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 field work will be four high order EM anomalies (RB_VA1-4 - Figures 1 & 2) identified from the recently completed VTEM airborne electromagnetic (EM) survey, three of which show correlation with magnetic anomalies (see ASX release dated 28 November 2012), which together are a strong indicator of mineralised systems.

Subsequent to the initial VTEM survey, 100m infill VTEM lines were flown over the four high order EM anomalies to refine the primary targets. Outcomes from this work include:

- identification of an even stronger central section of the anomaly at RB_VA1;
- the anomalism at RB_VA2 was confirmed over a longer strike length (700m); and
- confirmation of the more subtle / low amplitude anomaly RB_VA3.

In addition to the priority VTEM anomalies, the Company will also target an 8km long trend of anomalous Ni-Cu-Co mineralisation identified from historic aircore drilling (see ASX release dated 24 September 2012). There are also over ten second order VTEM anomalies to be followed up.

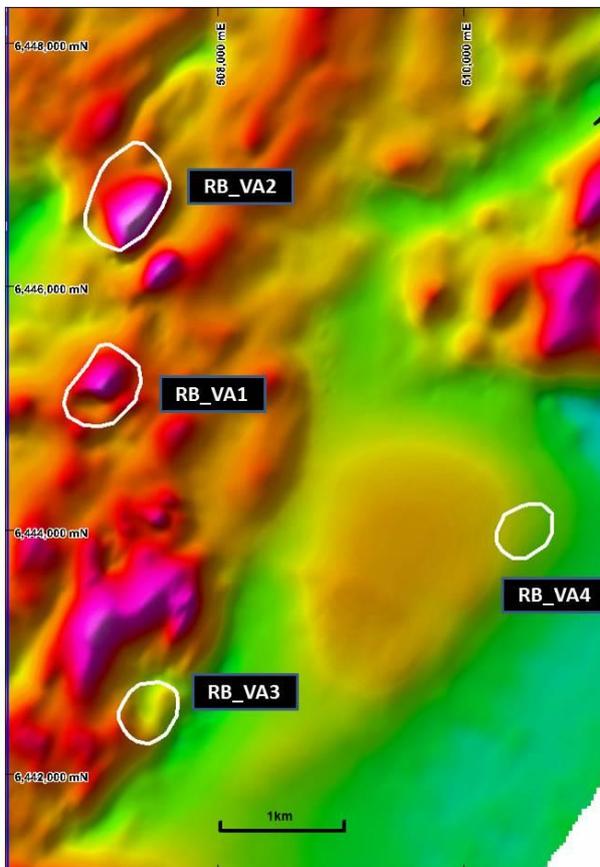
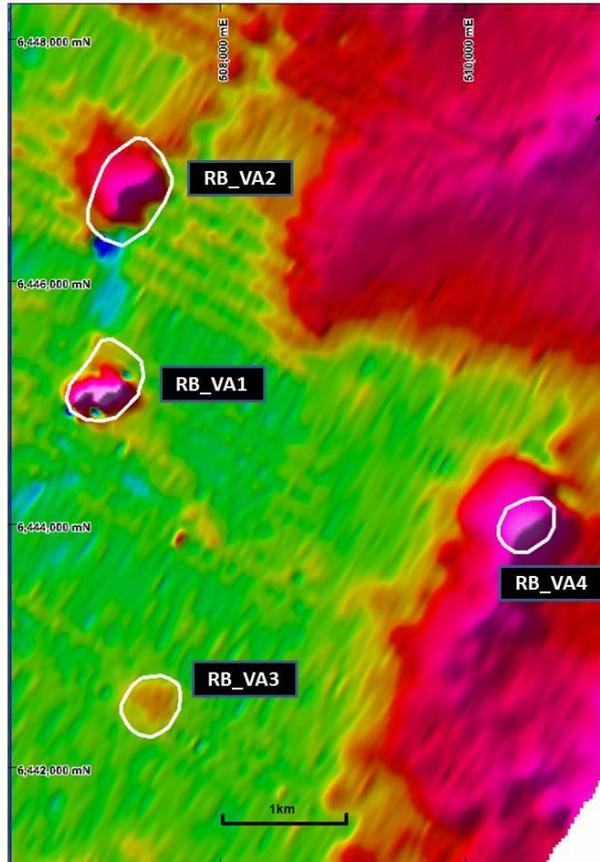
Soil sampling programmes have commenced. The Company has scheduled ground based EM surveys in early Q1 2013 and it is expected that a programme of aircore drilling will follow up the most promising targets from this work late in Q1 2013.

Managing Director, Bruce McQuitty said the grant of the tenement is timely for the commencement of field work, following the promising VTEM results.

“The VTEM survey has generated high priority targets for immediate ground-based follow up.

Our review of historic aircore drill results has also generated several promising targets within an 8 kilometre strike trend of a prospective layered mafic-ultramafic intrusion.”

“Our exploration will focus on the discovery of Nova-style deposits within an exciting new nickel province, where our initial results suggest some hallmarks commonly associated with significant mineralisation.”



Figures 1 & 2: Late Channel B-field EM (top) and TMI magnetics (bottom) showing high-order priority targets RB_VA1 to RB_VA4. Note the correlating magnetic anomalies for targets RB_VA1 to 3.

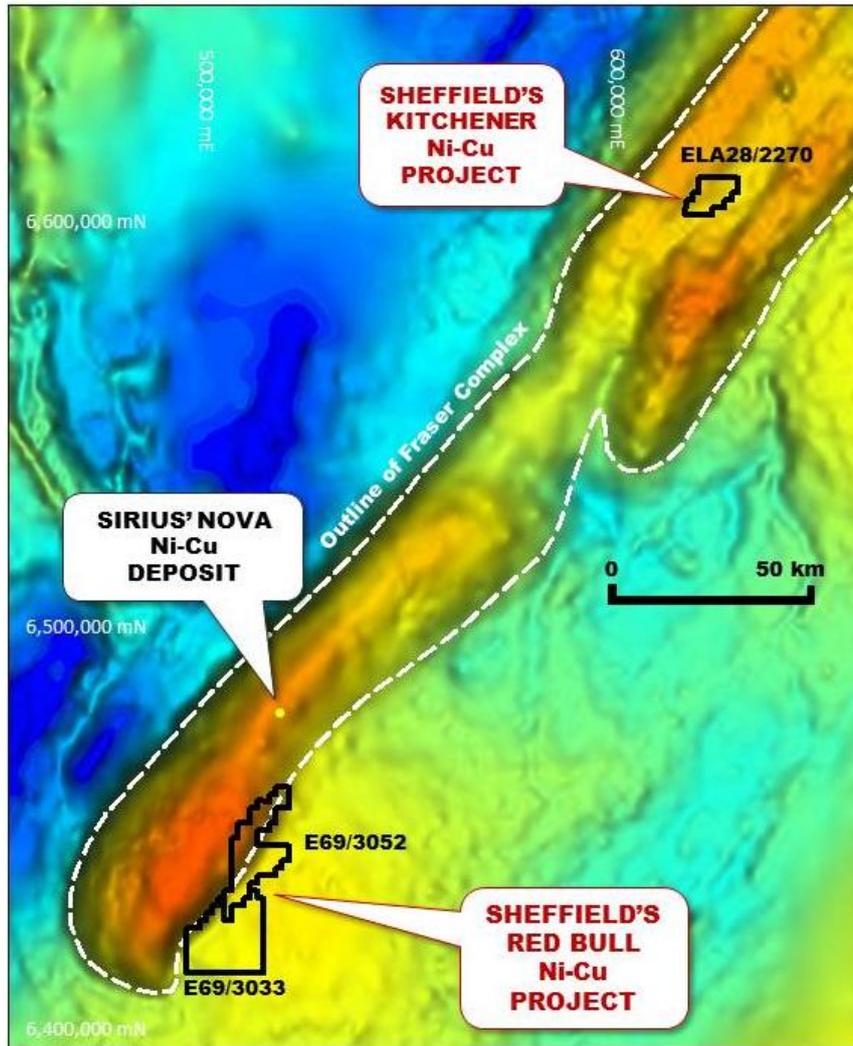


Figure 3: Location of Red Bull Project on a gravity image outlining the Fraser Complex

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 AND EXPLORATION TARGET 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 6,000km² 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 525km² Red Bull project is located in the highly prospective Fraser Complex within 20km of Sirius Resources NL's (ASX:SIR) Nova Ni-Cu 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.

TALC

Sheffield's large Moora Talc Belt project contains numerous talc occurrences and is located near Imerys' long-life Three Springs talc mine in WA's Mid-West region. The Company is targeting high purity talc, similar to that produced from the simple quarrying operation at Three Springs.