

ASX and Media Release

18 February, 2015

GROUND EM SURVEYS COMMENCE AT RED BULL NICKEL PROJECT

KEY POINTS

- Extensive high-powered moving loop electromagnetic surveys have commenced at the Red Bull Ni-Cu project in the Fraser Range
- Surveys are targeting a layered mafic/ultramafic complex with areas of nickel anomalism in soils and aircore drilling
- High priority conductors will be prioritised for RC/diamond drilling as soon as possible

Sheffield Resources Limited ("Sheffield" "the Company") (ASX:SFX) today announced the commencement of high-powered, ground Moving Loop EM surveys at its 100% owned Red Bull Nickel Project, located in the Fraser Range region of Western Australia.

Red Bull is within 20km of Sirius Resources NL's (ASX:SIR) Nova Nickel-Copper deposit and approximately 15km from Sirius' Crux prospect (Figures 1 & 2).

The surveys will focus on the Northern Targets region at Red Bull, where previous aircore drilling and soil sampling has outlined significant Ni-Cu-Co anomalism associated with an 8km strike length of a mafic/ultramafic complex (see ASX release dated 11 February, 2014).

This includes the Hook prospect, where previous aircore drilling intersected a strongly anomalous interval of **2m @ 0.25% Ni**, **0.07% Cu**, **0.03% Co**, **34ppb Pd**, **25ppb Pt and 0.64% Cr** from 54m (REAC458). The Hook prospect is associated with a northeast striking, linear magnetic low which has a coincident Ni-Cu-Co soil anomaly (Figure 3).

Another area of interest to be covered by the EM survey is a 2.5km long nickel-in-soil anomaly associated with a northwest striking fault to the west of Hook (Figure 3).

The EM surveys are expected to take 4-8 weeks to complete. Should suitable conductors be identified, they will be modelled and prioritised for direct testing with RC/diamond drilling as soon as possible.

Sheffield's Managing Director Bruce McQuitty said it was exciting to kick off Sheffield's 2015 Fraser Range nickel exploration campaign.

"Whilst the Thunderbird HMS Project remains our key focus, Red Bull is situated in a highly prospective geological setting for nickel sulphide mineralisation and justifies a persistent and systematic exploration approach.

"The Southern Fraser Range is experiencing a surge of exploration activity in early 2015 and our Red Bull project is in the heart of the action.

"We also look forward to commencing aircore drilling at the Big Bullocks project in the northern Fraser Range later this quarter.

"We have a large tenement holding of over 2,000km² in the Fraser Range and have active field programs scheduled for the first half of 2015, aimed at generating nickel sulphide targets for deeper RC/diamond drilling."



Figure 1: Location of Red Bull project in southern Fraser Range



Figure 2: Sheffield's tenement holding in Fraser Range



Figure 3: Detail of planned Ground EM surveys over interpreted geology with nickel soil anomalies

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COMPLIANCE STATEMENTS

EXPLORATION RESULTS

The information in this report that relates to Exploration Results is based on information compiled by Mr David Boyd, a Competent Person who is a Member of Australian Institute of Geoscientists (AIG). Mr Boyd 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 Boyd 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 Exploration 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:

"LARGE NI-Cu-Co ANOMALIES IDENTIFIED IN THE FRASER RANGE", 11 February, 2014

These announcements are available to view on Sheffield Resources Ltd's web site

www.sheffieldresources.com.au.

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

FORWARD LOOKING 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", "target", "scheduled", "intends", "potential", "prospective" and similar expressions.

ABOUT SHEFFIELD RESOURCES

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

ASX Code:	SFX	Market Cap @ 73cps	\$98.1m
Issued shares:	134.4m	Cash: \$4.7m (at 31 Dece	mber 2014)

Sheffield's projects are all situated within the state of Western Australia and are 100% owned by the Company.

HEAVY MINERAL SANDS

The Dampier project, located near Derby in WA's northwest, contains the large, high grade zircon-rich Thunderbird HMS deposit. Sheffield is currently undertaking a pre-feasibility study on Thunderbird.

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 has over 2,000km² of tenure in the Fraser Range region, including the Red Bull project which is within 20km of Sirius Resources NL's (ASX:SIR) Nova Ni-Cu deposit.

IRON

Sheffield's Panorama and Mt Vettel DSO iron projects are located in the North Pilbara region, near existing iron ore mines and within potential trucking distance of Port Hedland.

POTASH

Oxley, located in WA's Mid-West region, is a large scale, unconventional hard rock potash project with potential to generate products for the fertiliser market.