

DRILLING COMMENCES AT RED BULL NICKEL PROJECT, FRASER RANGE

KEY POINTS

- Diamond and RC drilling program underway at high priority Stud Prospect at Red Bull
- Drilling to test bedrock conductor and 1km trend of IP anomalism
- Targets located below significant nickel-copper anomalism in aircore drilling
- Modelled bedrock conductor of 500m x 500m, depth to top 150-200m
- Traces of nickel and copper sulphides in end-of-hole aircore drill samples
- Drilling is expected to take 2 to 3 weeks to complete

Sheffield Resources Limited (“Sheffield” “the Company”) (ASX:SFX) today announced the commencement of an RC and diamond drilling program at the high-priority Stud nickel-copper target at its 100% owned Red Bull Project, located in the Fraser Range region of Western Australia (Figure 2). The Stud Prospect is located just 21km to the south of the Nova nickel-copper deposit.

The target at the Stud Prospect comprises a bedrock conductor located beneath strong nickel-copper anomalism in shallow aircore drill holes. Modelling of the conductive anomaly indicates a large source (~500m x 500m), striking NNE-SSW, with a vertical to 85 degree plunge to the ESE and a depth to top of ~150-200m (see Figure 1 and ASX release dated 23 June 2015).

Sheffield’s Managing Director Bruce McFadzean said the Stud prospect was one of the most compelling drill targets in the Fraser Range.

“With a combination of bedrock conductor, strong nickel anomalism and observed trace amounts of nickel sulphide, the Stud target has all the right ingredients for a discovery,” he said.

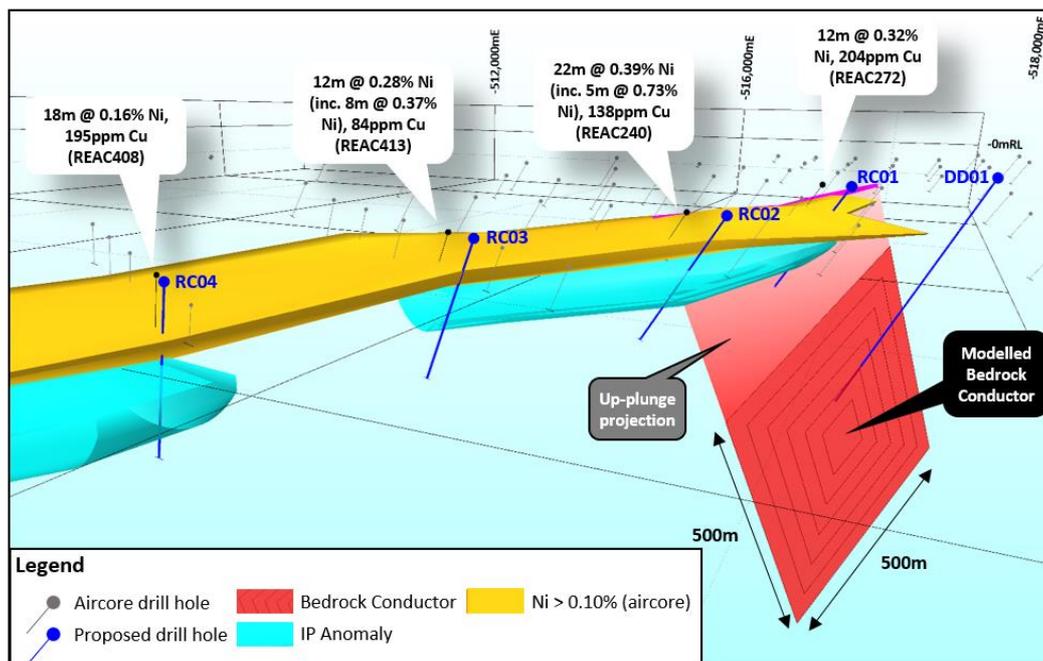


Figure 1: Stud prospect showing the modelled bedrock conductor beneath extensive nickel geochemical anomalism in shallow aircore drill holes and location of proposed DD and RC holes

One diamond drill hole will target the conductor, while four reverse circulation (RC) drill holes will target IP centres (potentially related to disseminated sulphide) with coincident nickel-copper geochemical anomalism in aircore holes. These holes have been designed to target potential bedrock sulphide mineralisation located towards the base of a mafic-ultramafic intrusive complex. The drilling programme has provision for additional drill holes and down-hole electromagnetic surveying if initial results are positive.

DD01 Targeting:

- Modelled bedrock conductor of 500m x 500m, depth to top 150-200m
- Along strike to north of >0.1% Ni Stud aircore anomaly.

RC01 Targeting:

- IP anomaly coincident with up-plunge projection of modelled conductor
- Beneath aircore anomalism **12m @ 0.32% Ni**, 204ppm Cu, 337ppm Co, 8ppb Pt from 37m (REAC272)

RC02 Targeting:

- IP anomaly
- Beneath aircore anomalism **22m @ 0.39% Ni**, 138ppm Cu, 272ppm Co, 7ppb Pt, from 32m (REAC240), including **5m @ 0.73% Ni**, 168ppm Cu, 466ppm Co from 33m

RC03 Targeting:

- Beneath aircore anomalism **8m @ 0.37% Ni**, 0.01% Cu, 0.01% Co, 4.4ppb Pt, from 47m (REAC413)

RC04 Targeting:

- IP anomaly
- Beneath aircore anomalism **18m @ 0.16% Ni**, 195ppm Cu, 97ppm Co, 5.2ppb Pt, from 42m (REAC408), including **4m @ 0.26% Ni**, 306ppm Cu, 116ppm Co from 46m

Results of aircore drilling and geophysical surveys used to generate these drill targets have previously been reported by Sheffield in ASX announcements dated 28 October, 2015; 23 June, 2015; 7 July, 2014; 11 February, 2014; 12 September, 2013 and 27 November, 2013.

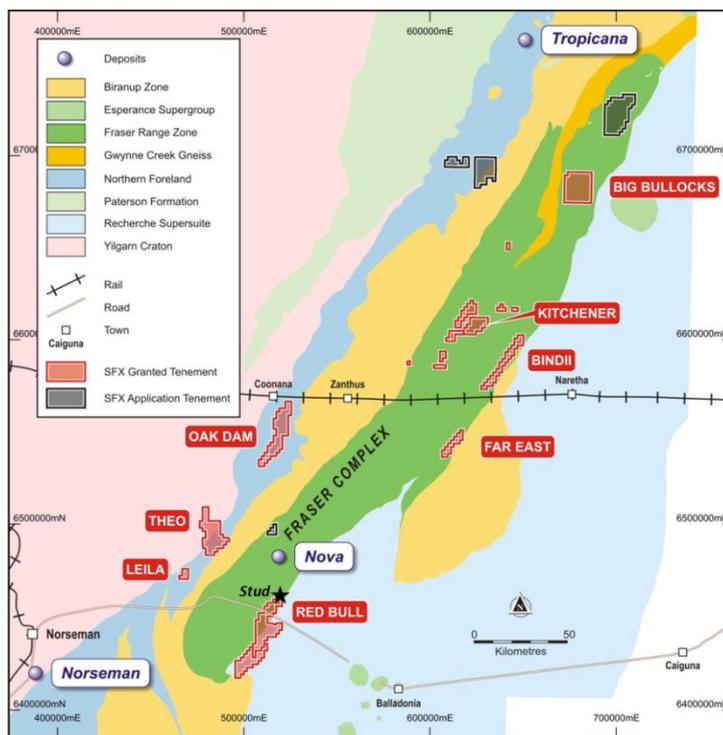


Figure 2: Location of Sheffield’s Red Bull project & Stud prospect in relation to Nova Ni-Cu deposit

ENDS

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COMPLIANCE STATEMENTS

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:

- "SHEFFIELD TO DRILL COMPELLING NICKEL TARGET AT RED BULL Ni-Cu PROJECT, FRASER RANGE" 28 October, 2015
- "COMPELLING NEW DRILL TARGET IDENTIFIED FROM GROUND EM SURVEY AT RED BULL NICKEL PROJECT" 23 June, 2015
- "LARGE BEDROCK CONDUCTOR IDENTIFIED AT RED BULL Ni-Cu PROJECT, FRASER RANGE", 7 July, 2014
- "LARGE Ni-Cu-Co ANOMALIES IDENTIFIED IN THE FRASER RANGE", 11 February, 2014

This report also includes information that relates to Exploration Results which were prepared and first disclosed under the JORC Code 2004. The information has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. The information was extracted from the Company's previous ASX announcements as follows:

- "THREE NEW NICKEL TARGETS FROM AIRCORE DRILLING AT RED BULL", 12 September, 2013
- "AIRCORE DRILLING UNDERWAY AT RED BULL NICKEL PROJECT", 27 November, 2013

These announcements are available 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 reporting of Exploration Results 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 (Sheffield) is focused on developing its 100% owned, world class Thunderbird Mineral Sands Project, located near Derby in Western Australia.

Post Placement:

| | | | |
|----------------|---------|-----------------------|----------|
| ASX Code: | SFX | Market Cap @ 42.0cps: | \$63.1m* |
| Issued shares: | 150.3m* | Cash: | \$10.2m* |

*Assumes settlement of \$5m placement (including director participation which is subject to shareholder approval) and \$2m SPP as announced 26 Nov 2015

THUNDERBIRD MINERAL SANDS

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

The deposit is rich in zircon, which sets it apart from many of the world's operating and undeveloped mineral sands projects which are dominated by lower value ilmenite.

Sheffield's Pre-feasibility study shows Thunderbird is a modest capex project that generates strong cash margins from globally significant levels of production over a 40 year mine life.

The Company is targeting project construction commencing 2017 and initial production in 2019. The initial planned production profile is aligned with expected emerging supply gaps in global mineral sands markets.

NICKEL-COPPER

Sheffield has over 1,900km² of 100% owned tenure in the Fraser Range region of Western Australia, including the Red Bull project which is within 20km of the Nova Ni-Cu deposit. The Company is exploring the region for magmatic nickel deposits similar to Nova.