

SHEFFIELD TO DRILL COMPELLING NICKEL TARGET AT RED BULL Ni-Cu PROJECT, FRASER RANGE

KEY POINTS

- Diamond and RC drilling planned this quarter to test bedrock conductor and IP anomalies at the new, high priority Stud Prospect
- Stud Prospect comprises a bedrock conductor located beneath significant Ni-Cu anomalism:
 - Modelled bedrock conductor of 500m x 500m, depth to top 150-200m
 - Significant nickel anomalism in shallow aircore drill holes coincident with up-dip projection of conductor: e.g. 12m @ 0.32% Ni from 37m (REAC272)
 - 1km trend of IP anomalism (possible disseminated sulphide source) extends south from conductor and coincides with >0.1% Ni anomalism in aircore drill holes, e.g. 5m @ 0.73% Ni from 33m in hole REAC240
 - 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 also increases footprint in the Fraser Range with two new exploration licence applications, one located just 17km north of Nova-Bollinger

Sheffield Resources Limited (“Sheffield” “the Company”) (ASX:SFX) today announced plans to drill-test a new, high-priority Ni-Cu target this quarter at its 100% owned Red Bull Nickel Project, located in the Fraser Range region of Western Australia (Figure 3).

The target at the Stud Prospect comprises a bedrock conductor located beneath significant Ni-Cu anomalism in shallow aircore drill holes, comprising a coherent anomaly of >0.2% maximum Ni-in-hole over a strike length of 1.8km. 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 (Figure 1).

A combination of diamond core and reverse circulation drilling is planned as an initial test of both the source of the bedrock conductor and IP centres along strike with coincident Ni-Cu geochemical anomalism (Figure 2). Drilling is scheduled to be completed by the end of Q4 2015, with results expected in Q1 2016.

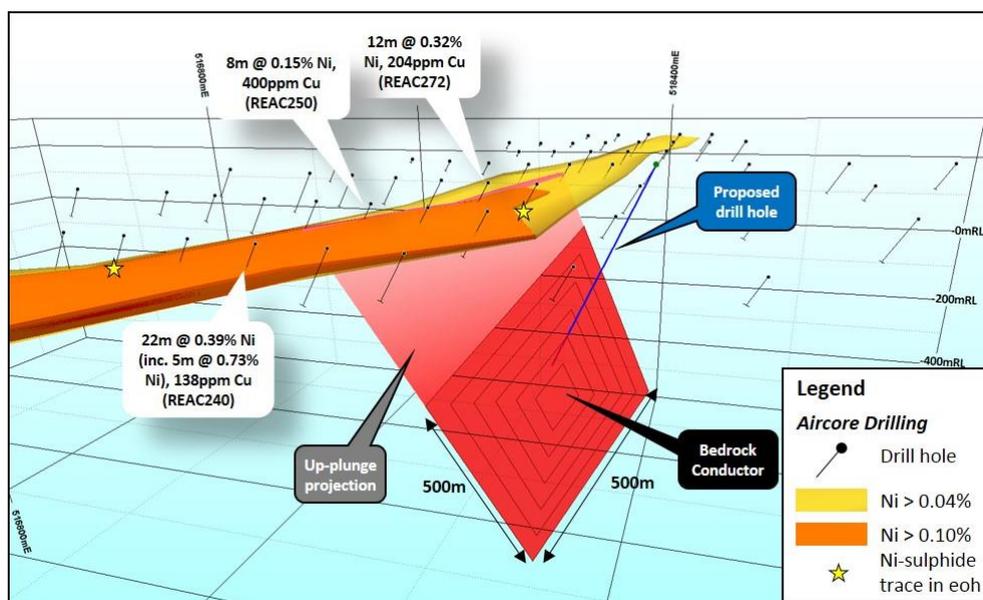


Figure 1: Stud prospect showing modelled bedrock conductor beneath extensive nickel geochemical anomalism in shallow aircore drill holes

Sheffield's Managing Director Bruce McQuitty said it was exciting to be back drilling in the Fraser Range.

"Although we outlined the Stud target several months ago, we have been focused on finalising Pre-Feasibility work on our flagship Thunderbird Mineral Sands Project. With the PFS successfully completed, we now have the opportunity to test this compelling target with a short, cost effective drill program."

The discovery of a bedrock conductor at the Stud prospect was announced on 23 June 2015, following the completion of a systematic high-powered MLTEM survey over the Northern Targets at Red Bull. Prior to this, an aircore drilling program at Stud during H2 2013 had outlined a coherent anomaly of >0.2% maximum Ni-in-hole over a strike length of 1.8km.

Significant results from this aircore drilling in the area immediately up-plunge from the modelled bedrock conductor include:

- **22m @ 0.39% Ni**, 138ppm Cu, 272ppm Co, 7ppb Pt, from 32m (REAC240) including **5m @ 0.73% Ni**, 168ppm Cu, 466ppm Co from 33m
- **12m @ 0.32% Ni**, 204ppm Cu, 337ppm Co, 8ppb Pt from 37m (REAC272)
- **8m @ 0.15% Ni**, 400ppm Cu, 261ppm Co, 14.5ppb Pd, 14.5ppb Pt from 22m (REAC250)
- **12m @ 0.15% Ni**, 152ppm Cu, 145ppm Co from 30m, 14.3ppb Pd (REAC239) including **4m @ 0.22% Ni**, 192ppm Cu, 227ppm Co from 38m

(see ASX releases dated 12 September 2013 and 27 November 2013 for full details)

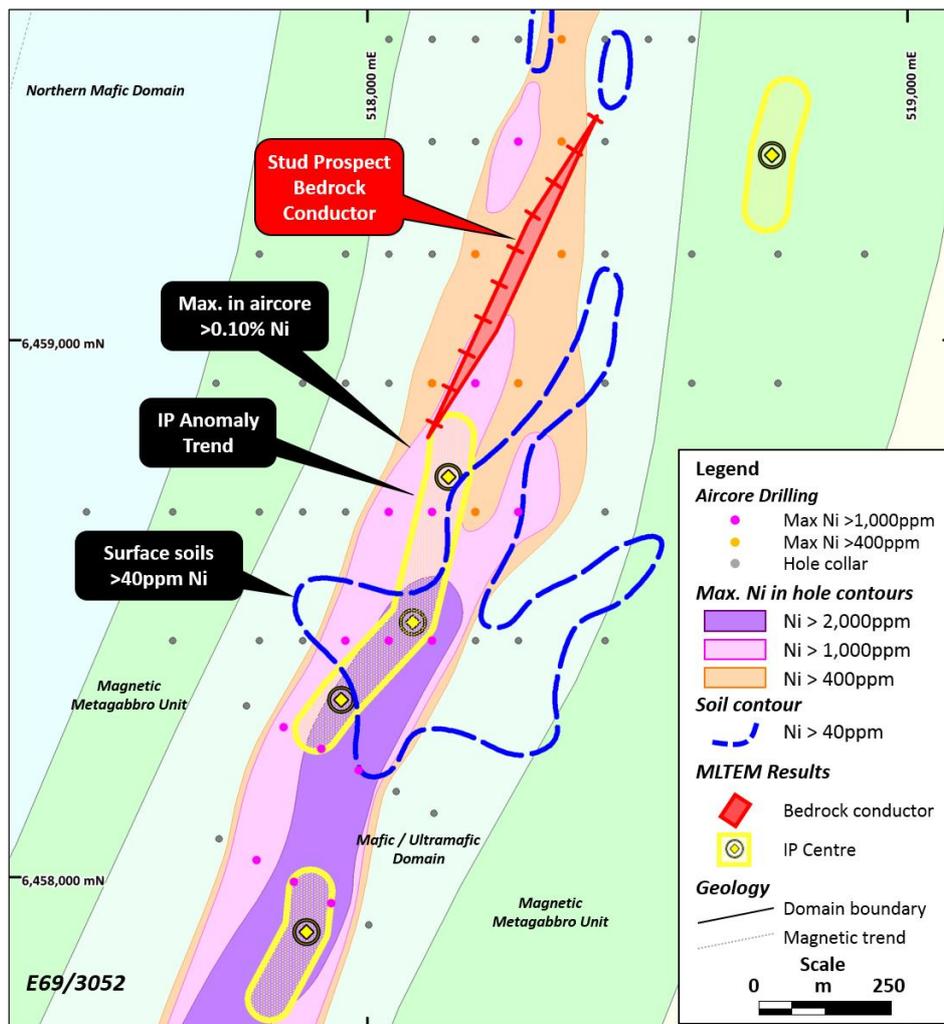


Figure 2: Plan of the Stud prospect showing nickel anomalism in aircore drilling and soils along strike from the new bedrock conductor

In addition to the anomalous geochemical results, trace amounts of the nickel-sulphide mineral violarite (FeNi_2S_4) were observed in end-of-hole samples from two drill holes; REAC273 and REAC238 at Stud (see Figure 1 and ASX release dated 27 November 2013).

Three localised zones of induced polarisation (IP) anomalism have also been identified immediately south along strike from the new bedrock conductor (see Figure 2 and ASX release dated 7 July, 2014). The IP anomalism may be related to the presence of disseminated sulphide in the bedrock. Its location along strike from the bedrock conductor may represent a transition from a disseminated to semi-massive sulphide source.

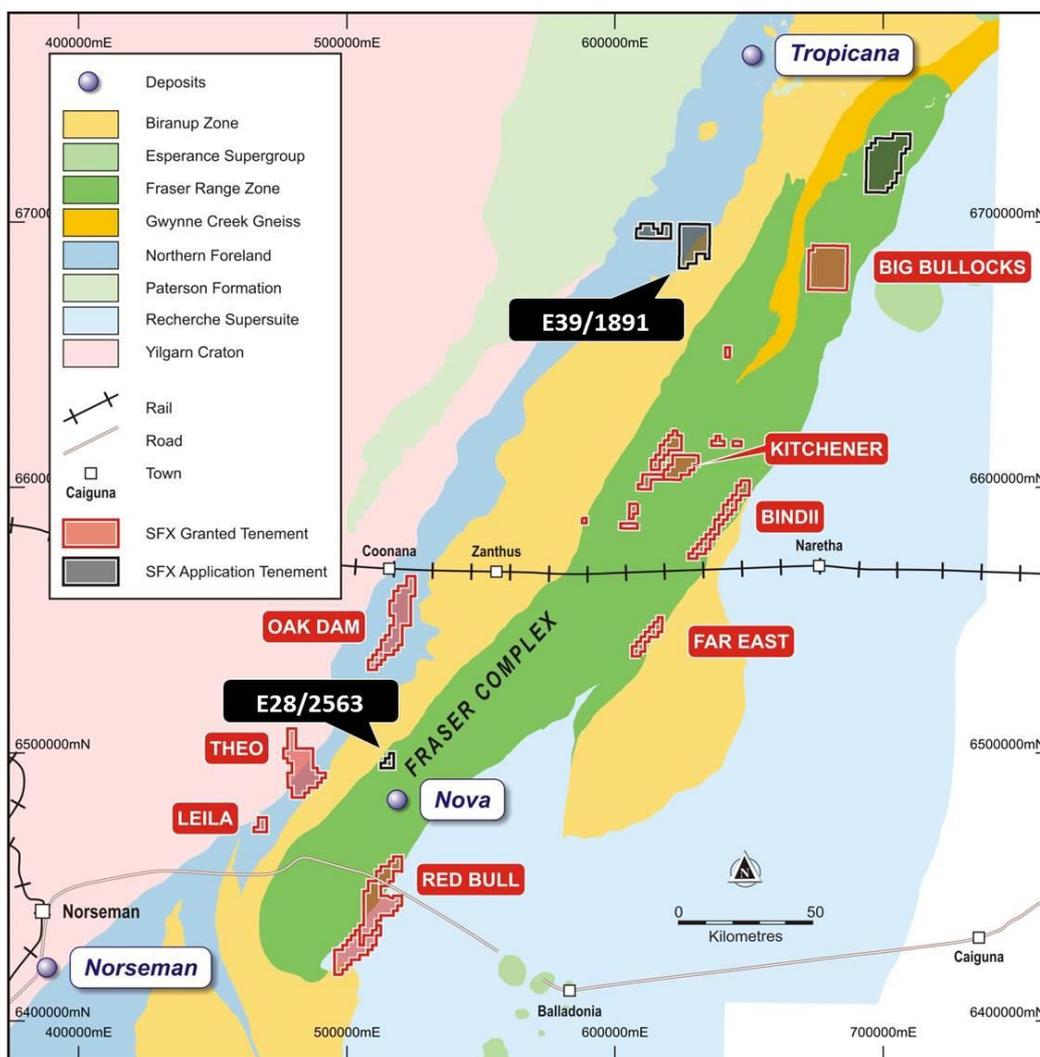


Figure 3: Sheffield's tenement holding in Fraser Range

Sheffield recently increased its footprint in the Fraser Range by applying for two highly prospective exploration licences; E28/2563 and E39/1891 (Figure 3).

E28/2563 is located near the northern margin of the Fraser Complex, just 17km to the north of the Nova-Bollinger nickel deposit and 14km to the northwest of Boadicea's Red Cap EM target. The tenement contains the Similkameen gold prospect which has previously been targeted for structurally controlled "Tropicana" style gold mineralisation, returning historic drill intercepts up to 4m @ 1.71g/t Au¹. The tenement overlies mafic/ultramafic rocks of the Fraser Complex and will be evaluated for its potential to host nickel mineralisation.

¹Matsa Resources Ltd ASX release 18 June 2013.



E39/1891 is located 70km south of the Tropicana gold deposit and is adjacent to the Mustang and Corvette gold prospects. The two tenement applications increase Sheffield's total ground position in the Fraser Range region to 1,912km².

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:

- "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

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

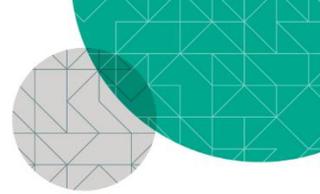
These announcements are available on Sheffield Resources Ltd's web site www.sheffieldresources.com.au.

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.

ASX Code:	SFX	Market Cap @ 54cps	\$72.6m
Issued shares:	134.4m	Cash: \$5.1m (at 30 June 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.

