

PREPARATIONS UNDERWAY FOR COMMENCEMENT OF COBALT, GOLD, COPPER EXPLORATION AT GREENVALE

- Drilling programs and geophysical survey to commence March-April 2018 at Greenvale Project targets:
 - New Lucky Creek nickel-cobalt prospect
 - New "Big Mag" nickel-cobalt-copper-gold prospect
 - Mineral resource drilling at Steam Engine Gold Deposit
 - o Bottletree Porphyry Copper Prospect IP survey
 - Wyandotte copper prospect drilling
- Reconnaissance field programs commencing
- Land access arrangements underway
- Drilling contracts sought

Superior Resources Limited (ASX Code: **SPQ**) (**Superior** or **Company**) is pleased to provide an update on the progress of preparatory work for the commencement of initial and phase 2 exploration programs at the Company's 100%-owned Greenvale Project.

This work follows a recent capital raising which raised \$625,619 via an over-subscribed placement to sophisticated investors and is being conducted during the Company's current rights issue campaign to raise up to an additional \$1.238 million (refer ASX announcement, 17 January 2018). The rights issue is scheduled to close on 2 March 2018.

Preparatory work

The following preparatory work is underway:

- Land access arrangements with three pastoral landholders in progress;
- Reconnaissance field inspections and hand sampling;
- IP/MT geophysical survey on the Bottletree Prospect being planned with geophysical consultants;
- Planning for Aboriginal heritage clearances; and
- Tender process for drilling contracts.

Preparations for the commencement of exploration programs is expected to be completed within the next four to six weeks. Early access is being sought from landowners to enable the commencement of an IP/MT geophysical survey on the Bottletree Porphyry Copper Prospect during the first week of March 2018.

The first drilling program for 2018 is expected to commence late March to early April 2018 and will



be focussed on the Lucky Creek Prospect, Steam Engine Prospect, Bottletree Prospect (subject to the results of the geophysical survey) and subject to the outcomes of preliminary field work, the Wyandotte Prospect.

Greenvale targeting for H1 2018

NICKEL-COBALT

As indicted in recent market announcements, Superior is expanding its focus to realise the cobalt potential of its current and new projects and the potential synergies with the nearby advanced SCONI project (held by Australian Mines). This focus follows preliminary results of an on-going review of current and new project areas for apparent cobalt potential, a process that capitalises on the Company's extensive Queensland exploration database.

Two new nickel-cobalt prospects have been identified and will be targeted during 2018 (Figures 1 and 2):

- Lucky Creek Cobalt Prospect (refer ASX announcement, 18 December 2017):
 - soil geochemical and VTEM trend;
 - includes Big Omega VTEM anomaly; and
 - includes Lucky Duck Prospect;
- Big Mag Nickel-Cobalt-Copper-Gold Prospect (new tenement application EPM26751):
 - regionally large (7km x 6km) high order magnetic feature;
 - located within a potential mafic-ultramafic zone which includes the old Greenvale Nickel Mine (part of SCONI project) at its north eastern end.



Figure 1. Image of historic cobalt soil sampling assay data at the Lucky Creek Prospect, clearly highlighting anomalous cobalt zones. The maximum cobalt-in-soil value is 596 ppm cobalt. A high order VTEM anomaly is also outlined by dashed lines.





Figure 2. Airborne magnetics (RTP) processed image over the Greenvale Project area and surrounds. The "Big Mag" magnetic feature is visible in the lower left part of the image, which is located within new EPM application EPM26751 (dashed outline). The Lucky Creek and Lucky Duck prospect locations are shown together with other Greenvale Prospects.



Following an early reconnaissance field inspection, the **Lucky Creek Prospect** will be drilled with a program of rotary air-blast (RAB) drill lines over the main geochemically anomalous locations. This work is expected to commence during late March or early April 2018, after land access arrangements are finalised and weather permitting.

The **Big Mag Prospect** is currently under a new exploration permit for minerals (EPM) application, EPM26751, which is not subject to competition by any third party and is expected to be granted during the first half of 2018. In the meantime, desktop planning and analysis of historical exploration data will be completed over the next couple of months.

The Big Mag Prospect was considered prospective by BHP in joint venture with Glengarry Resources NL during the period 1999 to 2005, for porphyry and skarn style copper, nickel and gold mineralisation. Rock chip sampling by Glengarry reported anomalous nickel and cobalt assays in several locations.

Superior considers that the Big Mag anomaly may be part of a belt of mafic to ultramafic rocks associated with the Old Greenvale Nickel Mine. Further information will be provided after completion of the preliminary data review process.

GOLD

In parallel with the cobalt programs, drill program planning is underway for a phase 2 drilling program at the **Steam Engine Gold Deposit**. The purpose of this drilling program will be aimed at increasing the recently reported gold mineral resource estimate (**MRE**) at the prospect.

The recently reported maiden MRE is 1 million tonnes @ 2.5g/t gold (1.0g/t cut-off) for 85,000 ounces of gold (refer ASX announcement 19 October 2017).

This MRE relates to only a 400m strike length of gold lode at the main Steam Engine Lode. The total length of known gold lode identified at surface is at least 2.5 kilometres and comprises the (Figure 3):

- main Steam Engine Lode;
- Eastern Ridge Lode; and
- Southern Zone Lodes.

In addition to the known gold lodes at the Steam Engine Prospect, several gold-in-soil geochemically anomalous zones along strike and separately, parallel to the known lodes have not historically been followed up with any systematic exploration (Figure 4). These zones will be followed up during the first half of 2018.

The Steam Engine deposit is located less than 1km from the regional sealed highway (Gregory Development Road) and within 250kms and 300kms from Charters Towers and the Pajingo Gold Mine (Minjar Gold), respectively.





Figure 3. Steam Engine Gold Deposit – Interpreted geology showing the gold-bearing lodes (in red) and drill holes. The scale at the bottom right hand corner represents 200 metres.





Figure 4. Gold-in-soil processed image highlighting gold geochemical dispersal associated with the Steam Engine lodes. Circled areas indicate additional anomalous gold zones which, subject to field inspection, will be followed up in 2018.

PORPHYRY COPPER

Following the successful first phase drilling program at the large **Bottletree Prospect** in 2017 (Figure 5), which returned wide zones of up to 154m of 0.2% - 0.3% copper (open at depth), a detailed ground induced polarisation/magnetotellurics (IP/MT) geophysical survey is planned to be conducted over the prospect.

The IP/MT survey will be used to better characterise the system and to identify deeper and larger mineralised intrusive bodies typical of porphyry systems.

Depending on the results of the survey, a follow-up phase 2 drilling program may be conducted after the drilling of the Lucky Creek and Steam Engine Prospects.





Figure 5. Copper-in-soil processed image showing large scale regional Bottletree anomaly.

OTHER GREENVALE PROSPECTS

A process of desktop analysis and planning is continuing in respect of other significant prospects within the Greenvale Project. These include the Galah Dam Prospect, Halls Reward Prospect, Cockie Creek porphyry copper Prospect and One Mile. Further exploration work including drilling may be conducted on these prospects during 2018, budgets permitting.

For more information:

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The information in this report that relates to Exploration Results is based on information compiled by Mr Peter Hwang, who is a Member of the Australian Institute of Geoscientists. Mr Hwang has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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 Hwang consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Certain statements made in this report may contain or comprise certain forward-looking statements. Although Superior Resources Limited believes that any estimates and expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results and estimations could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in the economic and market conditions, success of business and operating initiatives and changes in the regulatory environment. Superior undertakes no obligation to update publicly or release any revisions of any forward-looking statements to reflect events or circumstances after the date of this report or to reflect the occurrence of unanticipated events.