

**Registered Office:** 

Level 2, 87 Wickham Terrace, Spring Hill, QUEENSLAND, 4000.

**Postal Address:** 

PO Box 10288, Brisbane Adelaide Street, QUEENSLAND, 4000. **Telephone:** 07 3839 5099

**Facsimile:** 07 3832 5300

Email: manager@superiorresources.com.au

## ASX RELEASE 27 March 2013

## Cockie Creek Copper Prospect Inferred Resource

## Summary

Superior Resources Limited (ASX Code: SPQ) (Superior) is pleased to announce the release of an initial inferred resource for the Cockie Creek Copper Prospect located 210km west-northwest of Townsville in northeast Queensland, Australia. The resource is:

Resource	Cut-off	Quantity	Average Grade	Description
Category	Grade	(million tonnes)	(%Cu)	-
Inferred	0.25% Cu	13Mt	0.42% Cu	Above 300RL

The inferred resource indicates that the Cockie Creek Copper Prospect contains an appreciable copper content and it establishes a solid foundation on which exploration for further resources at both Cockie Creek and the nearby One Mile Prospect can be completed

The Cockie Creek Copper Prospect lies approximately 5km northeast of SPQ's One Mile Mining Lease (ML) 6750 and within Exploration Permit for Minerals Application (EPMA) 18987 (Figure 1).

At Cockie Creek, disseminated copper mineralisation with some gold and molybdenum extends over a strike length of approximately 1.2km. It occurs associated with a quartz-biotite-hornblende schist unit enclosed within a metamorphosed basic volcanics sequence (Figure 2).

The inferred resource is an initial inferred resource estimated in accordance with the JORC Code using the results of historical drilling completed by MIM Exploration Pty Ltd (MIM) and Beacon Minerals Limited (BCN) and supplemented by additional information from SPQ. The historical drillhole information used for the estimation is considered to be of an appropriate standard to support the inferred resource estimation. The digital data includes the original digital drillhole files from the MIM drilling and digital files provided by BCN for their drilling. The BCN drillhole files were also reconstructed from the original laboratory files as a further check on the validity of the BCN information.



Figure 1. Location of Superior's Cockie Creek Copper Prospect and SPQ's neighbouring One Mile Mining Lease in northeast Queensland

The zone of copper mineralisation at Cockie Creek strikes at 50° magnetic and a local grid was established by MIM with its north point in this direction. This local grid (Cockie Grid) has been used as the reference for all coordinates used in the resource estimation and is the grid referenced in the coordinates that follow.

The drilling by MIM and BCN totals 6638m of drilling in 63 drillholes. Assay data from the MIM and BCN drillhole data was composited to 2m intervals and coordinated in the local Cockie Grid prior to the resource modelling.

The drilling provides adequate coverage between 1575N and 2150N to interpret sectional boundaries of a central zone of higher-grade copper mineralisation with good continuity and which can be inferred down to an RL of 300m (approximately 250m below surface). These sectional boundaries were used to produce an enclosing 3D triangulation of the central zone of copper mineralisation. Considerable lower-grade copper mineralisation occurs outside of this central zone of copper mineralisation. The drilling coverage of this latter mineralisation is poorer and is not adequate to allow interpretation of an enclosing 3D triangulation.

The surface expression of the central zone of copper mineralisation is shown in Figure 2. It has an average strike of 11° (Cockie Grid) and dips grid easterly at -80° (Figure 3). Resources within the central zone were block modelled using anisotropic inverse distance weighting (weighting factor 2) within the enclosing 3D triangulation. This resource modelling used assay data only from within the enclosing 3D triangulation of the central zone of copper mineralisation.

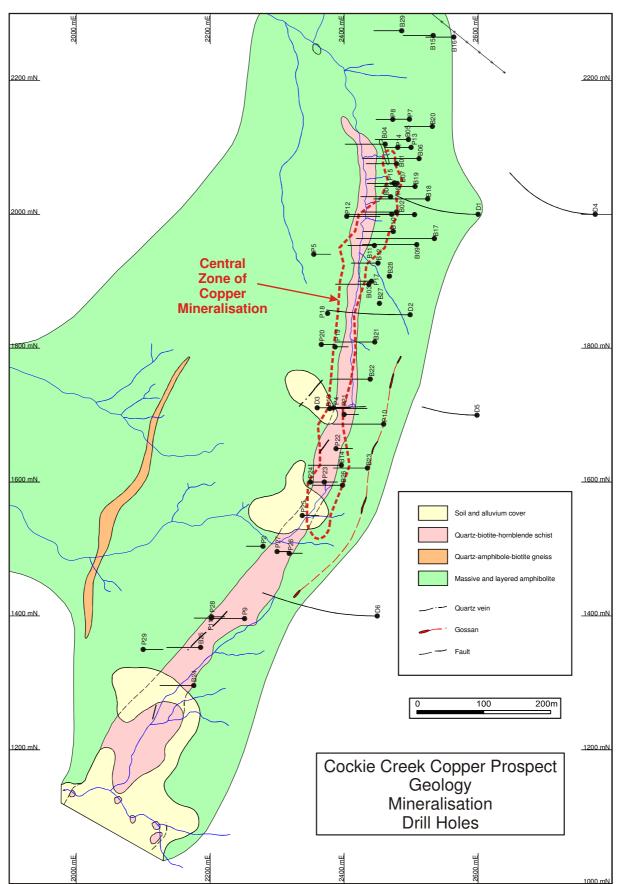


Figure 2. Cockie Creek Copper Prospect - Geology showing all drillholes and the Central Zone of Copper Mineralisation.

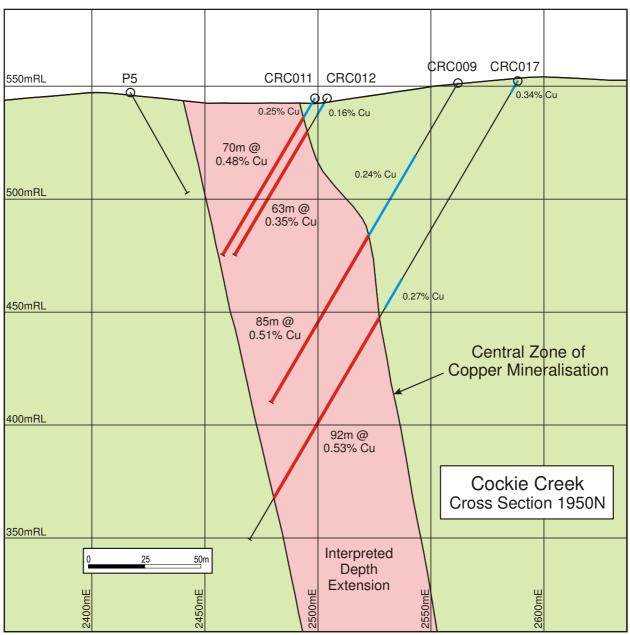


Figure 3. Cockie Creek Copper Prospect - Section 1950N showing Drillholes and Central Zone of Copper Mineralisation.

Resources outside of the central zone of copper mineralisation were block modelled using anisotropic inverse distance weighting (weighting factor 2) using tightly controlled parameters to ensure that block grades were localised to the areas drilled. Modelling was also restricted to the zone above 400RL. The modeling used assay data only from outside the enclosing 3D triangulation of the central zone of copper mineralisation. This approach to modelling severely restricted the estimated resource present in the area outside of the central zone of copper mineralisation such that 97% of the resource is contained within the central zone of copper mineralisation.

The historical drillhole data for the Cockie Creek Copper Prospect does not include specific gravity information. Based on the mineralogy and the sulphide content of the sampled material specific gravities of 2.8 t/m³ and 2.5t/m³ were used for the primary and secondary mineralisation within the resource model respectively.

A cut-off grade of 0.25% copper was applied to the Cockie Creek model to determine the resource present. This cutoff-grade was established by consideration of the likelihood that the Cockie Creek resource, if exploited, would be done so in combination with exploitation of other resources, if discovered, at Cockie Creek or One Mile. At this early stage it was also considered prudent to provide a resource estimation of the total amount of copper mineralisation reasonably present so all treatment options could be considered.

Based on the application of these parameters the inferred resource at the Cockie Creek Copper Prospect is:

Resource	Cut-off Grade	Quantity	Average Grade	Description
Category		(million tonnes)	(%Cu)	
Inferred	0.25% Cu	13Mt	0.42% Cu	Above 300RL
incl.				
Inferred	0.25% Cu	7.9Mt	0.41% Cu	Above 400RL
incl.				
Inferred	0.25% Cu	2.0Mt	0.39% Cu	Above 510RL
				(Oxide Zone)

Small amounts of gold and molybdenum occur with the copper mineralisation at Cockie Creek and potentially could provide additional value in the resource. Gold and molybdenum were estimated with copper in the model but are not reported. In the case of gold it is not known whether it will be recoverable with copper (chalcopyrite) and therefore it has not been reported. In the case of molybdenum, assaying for this element was not completed for all drillholes making the estimate of the molybdenum grade less certain and therefore it also has not been reported.

Further exploration to add to the resource on the Cockie Creek Copper Prospect will not be possible until the grant of EPMA18987. This application does not provide SPQ with an automatic right to the grant of the EPMA. However, SPQ is unaware of any impediment to the grant and expects that it will occur about the middle of 2013.

Ken Harvey Managing Director Contact: Mr Ken Harvey Ph (07) 3839 5099

The information in this report that relates to Mineral Resources and Exploration Results is based on information compiled by Mr Ken Harvey, a full-time employee and shareholder of Superior Resources Limited, who is a Member of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Mr Harvey 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 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Harvey consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.