

## ASX & MEDIA ANNOUNCEMENT

### Pahtohavare Copper-Gold Update

#### Central Oxide Zone

- ∂ Bulk sample and core sample dispatched to Canada for copper-gold metallurgical test work
  - results in November 2014
- ∂ Potential for significant additional copper-gold oxide ore:
  - within existing JORC resource pit shell; and
  - along strike of existing orebody
- ∂ If metallurgical test results are positive:
  - a scoping study (+/-30% accuracy) will be commenced to determine if an oxide mining operation is feasible; and
  - drill plans will be lodged with authorities to test targets

#### Central Primary Zone

- ∂ Primary copper mineralisation confirmed beneath oxide zone
- ∂ Geophysical (electromagnetic) anomalies and primary mineralisation confirm high potential primary copper targets
  - drill plans will be lodged with authorities to test targets

Hannans Reward Ltd (ASX:HNR) (Hannans or the Company) is pleased to provide an update on its 100% owned Pahtohavare Copper-Gold Project, located approximately 8km south-west of Kiruna, northern Sweden (see Figure 2 below for location map).

#### Introduction

By way of introduction, copper mineralisation was first discovered at Pahtohavare in 1984 by the state-owned exploration company Swedish Geological AB and later mined by Finnish mining company, Outokumpu. Copper-gold ore was initially mined from the 'Southern' orebody and then the 'South Eastern' orebody. A decision was made to develop an underground mining operation with a decline extending below South Eastern which serviced both orebodies until mining ceased in 1997 due to low copper prices. No known exploration drilling ever took place beneath the lowest mined levels of Southern and Southern East and therefore both remain open at depth, down dip and down plunge as confirmed by 3D geological modelling of the orebodies in 2013. Hannans has focussed its exploration activities to date on the shallow, high-grade Central orebody<sup>1</sup> which is the focus of this announcement.

#### Metallurgical Testwork on Oxide Ore

An opportunity for early cashflow at Pahtohavare exists if copper and gold ore within the Central oxide zone can be extracted economically. As reported last Quarter, Hannans has engaged Independent Metallurgical Operations Pty Ltd (IMO) from Perth, Western Australia to oversee preliminary metallurgical testwork designed to test the recoverability of copper and gold from the oxide ore. Activation Laboratories Ltd (Actlabs) located in Ontario, Canada has been awarded the contract to undertake the physical testwork. It is expected that the IMO report on this testwork will be available in November 2014.

---

<sup>1</sup> Refer ASX release dated 31 January 2014 and earlier

IMO has completed a detailed review of historical metallurgical testwork reports from Pahtohavare and has developed a testwork flow-sheet focussed initially on ore characterisation (Stage 1) followed by grinding and leaching testwork (Stage 2). Actlabs has now completed master composite preparation of the 600kg bulk sample (comprising reverse circulation crusher rejects). The ore characterisation (i.e. copper speciation testwork) will determine both the percentage of copper contained within oxides, carbonates, sulphides and silicates and what percentage of copper is acid soluble. This phase is critical because the results of Stage 1 will determine the steps required for the grinding and leaching testwork in Stage 2.

Actlabs will use a separate 50kg historical core sample<sup>2</sup> for the grindability testwork<sup>3</sup>. On inspection of the historic core being used for grindability testwork, Hannans noted a significant part of the core was copper mineralised but had not been assayed. The mineralised sections have now been cut and assayed (refer Appendix A for assay results).

### Scoping Study (+/-30% Accuracy)

If the metallurgical testwork results are positive, a scoping study will be initiated to consider the social, environmental, technical and economic viability of establishing an oxide mining operation. The Central orebody is located on a historic mine site which is expected to be considered favourably if permits for a new mining operation are submitted with authorities.

### Additional Copper-Gold Oxide Ore

While the current JORC Inferred Mineral Resource Estimate for oxide ore at Central is shown in the table below<sup>4</sup>, there is significant potential for additional copper-gold oxide ore within the existing JORC pit shell and along strike from the existing oxide orebody.

Area	Resource Category	Mt	Cu (%)	Au (g/t)	CuEq (%)	Mining Scenario	Material
Central	Inferred	1.4	1.8	0.6	2.4	Open Cut	Oxide
Southeast	Inferred	0.8	1.7	0.5	2.1	Open Cut + Underground	Sulphide
South	Inferred	0.1	1.3	0.6	1.9	Underground	Sulphide
COMBINED	Inferred	2.3	1.7	0.6	2.3		

**Table 1:** JORC Inferred Resource-Pahtohavare Project. (Open pit resources calculated using a Whittle optimised cut-off grade of 0.56% CuEq<sup>5</sup> for oxide material and 0.43% CuEq<sup>5</sup> for sulphide material. Underground resources calculated using a 1.48% CuEq<sup>5</sup>).

Hannans is optimistic that additional copper and gold mineralisation will be identified in the future at the Central oxide zone for the following reasons:

- ⦿ the JORC resource for Central is based on historic drilling only (pre-Hannans) and it does not include any mineralisation intersected during the 2013 drilling campaign; this campaign importantly demonstrated that zones of both the hanging wall and footwall are also mineralised, often despite the lack of visible copper mineralisation. Historically, only zones of visible copper mineralisation were submitted for assay. Whilst the drill results from 2013 are unlikely to significantly increase the tonnage or grade of the existing JORC resource it is expected that the level of confidence in the resource calculation will increase with the inclusion of this available additional data;
- ⦿ one conceptual RC hole drilled by Hannans in 2013 successfully intersected weak copper mineralisation along strike of the existing orebody and the significance of this result cannot be overstated. The single drillhole intercepted the same stratigraphic sequence hosting the copper-gold mineralisation at the Central orebody and confirms the potential for additional mineralisation along strike to the north and remains untested<sup>6</sup>.

<sup>2</sup> Diamond drillhole (PAH05002) drilled by Lundin Mining in 2005

<sup>3</sup> Bond Ball Work Index (BBWI)

<sup>4</sup> Refer ASX Announcement dated 31<sup>st</sup> January 2014

<sup>5</sup> Copper equivalent (CuEq) has been calculated using metal selling prices of USD\$3.56 / lb for Cu and USD\$1,510 / Oz for Au, along with metal recoveries of 90% for Au and 65% for Cu in sulphide material and 80% for Au and 50% of Cu in oxide material. The following equations were used:

- Oxide: CuEq = (1.12 x Au (ppm) grade) + (0.98 x Cu% grade)
- Sulphide: CuEq = (0.97 x Au (ppm) grade) + (0.99 x Cu% grade)

It is the company's opinion that the copper and gold metals used in the metal equivalent calculation have a reasonable potential for recovery and sale based on historical metallurgical testwork and previous mining.

<sup>6</sup> Refer ASX Announcement dated 17<sup>th</sup> September 2013.

### Primary Copper Mineralisation Confirmed beneath Oxide Zone

As described above, when Hannans inspected historic drill core prior to dispatching it to the laboratory for testwork it was noted that visible copper mineralisation at the end of the hole had not been assayed by previous explorers. The copper mineralisation is located within a silicified felsic which contains abundant open voids filled with gossanous material. Occasional copper oxides, primary copper sulphide (chalcopyrite) veining and weak brecciation were noted (refer to Appendix A for drillhole collar and assay information). Coincidentally in 2013 the Company completed a fixed-loop EM survey at Central which identified several conductors interpreted to be down plunge of the oxide ore and these remain to be drill tested.

The combination of primary copper sulphides at depth and untested EM targets beneath oxide ore is very encouraging and therefore the potential for additional primary copper mineralisation down dip and down plunge of the oxide zone at Central is significant.



**Figure 1:** Copper mineralised drillcore from drillhole PAH05002. Approximate depth 136m.

### Drillhole Planning

Hannans has commenced drillhole planning for Pahtohavare ahead of submitting the required workplans to the Swedish mining authorities. The new workplan for Pahtohavare will make provision for testing primary mineralisation located down-dip and down plunge at both the Central and Southern deposits and also for testing conceptual oxide and primary targets located along strike from known mineralisation.

Hannans has previously experienced lengthy delays (nearly 12 months) in obtaining authorisation to complete drilling at Pahtohavare however Hannans considers that the reasons for the permitting delays have now been resolved. Furthermore during the last drill program the drill contractor experienced difficulty reaching target depth primarily due to the RC drill equipment utilised and its suitability to complete the contracted program. Every effort is being made to ensure neither of these delays or challenges occur again in the future.

Subject to permitting and funding Hannans intends to recommence drilling at Pahtohavare to test these copper-gold targets.

For further information please contact:

Damian Hicks  
Managing Director  
+46 703 220 226 (M)  
[damianh@hannansreward.com](mailto:damianh@hannansreward.com) (E)

Amanda Scott  
Exploration Manager  
+46 703 221 497 (M)  
[amanda@hannansreward.com](mailto:amanda@hannansreward.com) (E)

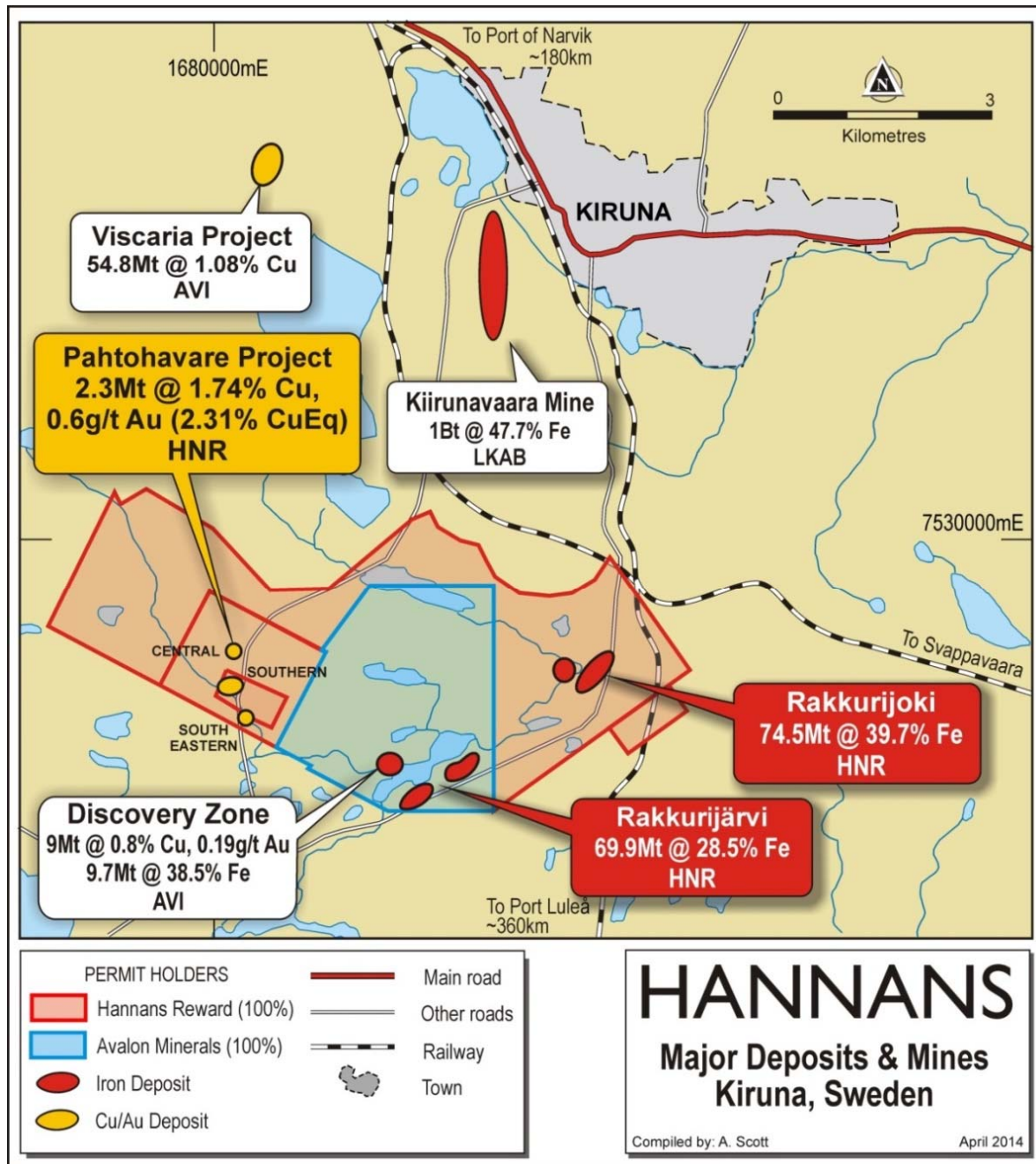


Figure 2: Map showing the location of the Pahtohavare Copper-Gold Project and deposits.

## Compliance Statements

The information in this document that relates to exploration results is based on information compiled by Amanda Scott, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy (Membership No.990895). Amanda Scott is a full-time employee of Hannans Reward Ltd. Amanda Scott has sufficient experience, which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been 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 (JORC Code). Amanda Scott consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

The information in this document that relates to Mineral Resource and Exploration Target Estimates for Pahtohavare is extracted from the report entitled "Re-Release of Maiden JORC Resource at Pahtohavare To Comply With JORC" created on 31 January 2014 and is available to view on the Company's website ([www.hannansreward.com](http://www.hannansreward.com)). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and in the case of Mineral Resources or Ore Reserves 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.

The information in this document that relates to Mineral Resource Estimates for Rakkurijoki and Rakkurijärvi is extracted from the report entitled "Kiruna Iron Project JORC Resource Update" created on 17 January 2012 and is available to view on the Company's website ([www.hannansreward.com](http://www.hannansreward.com)). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and in the case of Mineral Resources or Ore Reserves 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.



## Appendix A

Hole ID	Hole Type	Northing (RT90)	Easting (RT90)	RL	Dip	Azi	EOH (m)
PAH05002	Diamond	7528090	1680300	511	-60	247	141.3

Table 1: Drillhole collar information for PAH05002.

Hole ID	From (m)	To (m)	Width	Cu (ppm)	Cu (%)	Au (g/t)	New Assay	Comment
PAH05002	51.30	53.90	2.60	1270		0.005	No	
PAH05002	53.90	56.10	2.20	7660		0.177	No	
PAH05002	56.10	58.00	1.90	5040		0.174	No	
PAH05002	58.00	60.60	2.60	12350	1.23	0.539	No	
PAH05002	60.60	62.20	1.60	8210		0.323	No	
PAH05002	62.20	64.20	2.00	65600	6.56	2.02	No	
PAH05002	64.20	68.30	4.10	28000	2.80	1.975	No	
PAH05002	68.30	70.20	1.90	36500	3.65	1.105	No	
PAH05002	70.20	75.20	5.00	22800	2.28	0.387	No	
PAH05002	75.20	78.50	3.30	33800	3.38	0.499	No	
PAH05002	78.50	80.00	1.50	45200	4.52	0.553	No	
PAH05002	80.00	81.90	1.90	98800	9.88	5	No	
PAH05002	81.90	83.10	1.20	14250	1.42	0.185	No	
PAH05002	83.10	84.30	1.20	11950	1.19	0.47	Yes	
PAH05002	84.30	85.30	1.00	9010		0.02	Yes	
PAH05002	85.30	86.50	1.20	8620		0.04	Yes	
PAH05002	86.50	87.00	0.50	9450		1.86	Yes	
PAH05002	87.00	87.60	0.60	6370		0.22	Yes	
PAH05002	87.60	89.40	1.80	12550	1.25	0.02	Yes	Core Loss 1.1m
PAH05002	89.40	90.70	1.30	4840		0.01	Yes	Core Loss 0.4m
PAH05002	90.70	92.50	1.80	6290		0.06	Yes	Core Loss 0.4m
PAH05002	92.50	93.00	0.50	283		0.01	Yes	
PAH05002	121.00	121.50	0.50	23		<0.01	Yes	
PAH05002	121.50	123.30	1.80	14		<0.01	Yes	
PAH05002	123.30	124.20	0.90	8		<0.01	Yes	
PAH05002	124.20	124.50	0.30	7		<0.01	Yes	
PAH05002	124.50	125.30	0.80	1100		<0.01	Yes	Core Loss 0.3m
PAH05002	125.30	127.60	2.30	50		<0.01	Yes	
PAH05002	127.60	129.80	2.20	22		<0.01	Yes	
PAH05002	129.80	131.00	1.20	155		<0.01	Yes	
PAH05002	131.00	131.40	0.40	83		<0.01	Yes	
PAH05002	131.40	133.00	1.60	286		0.01	Yes	
PAH05002	133.00	136.00	3.00	1340		0.51	Yes	
PAH05002	136.00	136.30	0.30	31100	3.11	1.9	Yes	
PAH05002	136.30	137.10	0.80	2130		0.1	Yes	
PAH05002	137.10	137.50	0.40	531		0.01	Yes	
PAH05002	137.50	138.00	0.50	679		0.03	Yes	
PAH05002	138.00	138.40	0.40	442		<0.01	Yes	
PAH05002	138.40	139.40	1.00	2160		0.01	Yes	
PAH05002	139.40	140.60	1.20	5700		0.16	Yes	
PAH05002	140.60	141.30	0.70	593		0.01	Yes	

Table 2: Drillhole assay information for PAH05002. Original assays submitted by Lundin Mining to ALS Global for four-acid digest for copper (ICPMS61) and fire assay with ICP finish (AuICP21). New assays submitted by Hannans to ALS Global for four-acid digest for copper (ICPMS61) and fire assay with AAS finish (AuAA25).

**Table 1-JORC Code (2012 Edition) Pahtohavare Copper-Gold Project: Re-Assaying of Historic Drillhole**  
**Section 1 Sampling Techniques and Data** (Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	Commentary
<b>Sampling Techniques</b>	<ul style="list-style-type: none"> <li>∂ <i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>∂ <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>∂ <i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>∂ The current sampling of PAH05002 by Hannans was based on observed copper mineralisation. The sample intervals were determined by a Company geologist and the core was cut and sampled by ALS Global in Malå, Sweden.</li> </ul>
<b>Drilling Techniques</b>	<ul style="list-style-type: none"> <li>∂ <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</i></li> </ul>	<ul style="list-style-type: none"> <li>∂ The historic drilling (PAH05002) was completed using diamond drilling. The size was WL76 with a core diameter of 57.5mm.</li> </ul>
<b>Drill Sample Recovery</b>	<ul style="list-style-type: none"> <li>∂ <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>∂ <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>∂ <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>∂ The drill sample recovery for PAH05002 was recorded by the geologists who originally logged the hole in 2005 and also via core blocks placed by the drillers.</li> <li>∂ There are several oxidised zones where core loss has been recorded and the core is noticeably broken. The samples taken from deeper in the hole had excellent recovery.</li> <li>∂ The mineralisation is often associated with this zone of poorer recovery and oxidation.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>∂ <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>∂ <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i></li> <li>∂ <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>∂ PAH05002 was originally logged and sampled by geologists in 2005. The drill core has been stored in the Swedish Geological Survey's core archive facility in Malå, Sweden since 2005 and was made available to Hannans for the current sampling.</li> <li>∂ Whilst the hole was logged in its entirety by geologists in 2005 not all mineralised zones were sampled; these zones have now been sampled by the Company.</li> </ul>
<b>Sub-Sampling</b>	<ul style="list-style-type: none"> <li>∂ <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> </ul>	<ul style="list-style-type: none"> <li>∂ For both the original sampling and the current sampling ½ core has been taken</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Techniques and Sample Preparation</b>	<ul style="list-style-type: none"> <li>∂ If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>∂ For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>∂ Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>∂ Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>∂ Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<p>for chemical analysis.</p> <ul style="list-style-type: none"> <li>∂ For the current sampling ALS Global cut and sampled the core at their prep facility in Malå, Sweden prior to it being transported to their facility in Piteå, Sweden where the samples were finely crushed, dried and pulverised to produce a sub-sample for analysis with a four acid digest (ICPMS61) and fire assay (AuAA25).</li> <li>∂ The sample type and size is considered appropriate for the type of mineralisation.</li> </ul>
<b>Quality of Assay Data and Laboratory Tests</b>	<ul style="list-style-type: none"> <li>∂ The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>∂ For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>∂ Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>∂ The preparation and assay methods (four acid digest-ICPMS61 and fire assay AuAA25) are considered appropriate and the industry standard for the type of mineralisation.</li> <li>∂ Laboratory standards, blanks and duplicates were used as a QAQC check. Results have been analysed and produced acceptable results.</li> </ul>
<b>Verification of Sampling and Assaying</b>	<ul style="list-style-type: none"> <li>∂ The verification of significant intersections by either independent or alternative company personnel.</li> <li>∂ The use of twinned holes.</li> <li>∂ Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>∂ Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>∂ The current sampling of mineralised intercepts in PAH05002 has been completed and verified by the Company's Exploration Manager.</li> <li>∂ Results have been verified by the Company's independent metallurgical consultant, IMO Pty Ltd.</li> <li>∂ Assay data has been loaded into the Company's master database.</li> </ul>
<b>Location of Data Points</b>	<ul style="list-style-type: none"> <li>∂ Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>∂ Specification of the grid system used.</li> <li>∂ Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>∂ Original hole collar locations were determined by handheld GPS with an accuracy of ±1m.</li> <li>∂ The grid system used is Swedish Coordinate system RT90 2.5V.</li> <li>∂ Topographic control at Pahtohavare has been established by previous surveying of historic drill collars by RTKGPS.</li> </ul>
<b>Data Spacing and Distribution</b>	<ul style="list-style-type: none"> <li>∂ Data spacing for reporting of Exploration Results.</li> <li>∂ Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>∂ Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>∂ PAH05002 is located within the Central Deposit at Pahtohavare and is one of many diamond holes drilled into the deposit.</li> <li>∂ The typical profile spacing at Central is currently 100m.</li> </ul>
<b>Orientation of Data in</b>	<ul style="list-style-type: none"> <li>∂ Whether the orientation of sampling achieves unbiased sampling of possible</li> </ul>	<ul style="list-style-type: none"> <li>∂ PAH05002 was drilled to intercept mineralisation perpendicular to strike</li> </ul>



Criteria	JORC Code Explanation	Commentary
<b>Relation to Geological Structure</b>	<p><i>structures and the extent to which this is known, considering the deposit type.</i></p> <p>∂ <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></p>	<p>giving a drillhole azimuth of 247°.</p> <p>∂ The mineralisation at the Central deposit is interpreted to strike at approximately 340° and dip between -45° to 70° towards 070°.</p> <p>∂ Due to the drilling perpendicular to mineralisation no sample bias is believed to be introduced.</p>
<b>Sample Security</b>	<p>∂ <i>The measures taken to ensure sample security.</i></p>	<p>∂ The samples were cut, transported, prepared and analysed by the same laboratory, ALS Global.</p>
<b>Audits or Reviews</b>	<p>∂ <i>The results of any audits or reviews of sampling techniques and data.</i></p>	<p>∂ Sampling and assaying techniques are considered industry standard.</p> <p>∂ No specific audit or review of the sampling or assay techniques has been undertaken for this current sampling although the Company's independent metallurgical consultant, IMO Pty Ltd, has provided guidance and review.</p>

**Section 2 Reporting of Exploration Results** (Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<b>Mineral Tenement and Land Tenure Status</b>	<p>∂ <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></p> <p>∂ <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></p>	<p>∂ The Central deposit at Pahtohavare is located on the Pahtohavare nr 2 permit which is owned 100% by the Company's fully-owned Swedish subsidiary Kiruna Iron AB.</p>
<b>Exploration Done by Other Parties</b>	<p>∂ <i>Acknowledgment and appraisal of exploration by other parties.</i></p>	<p>∂ The Central deposit has been explored historically by the Swedish Geological Survey (SGU) in the 1980's. PAH05002 was drilled by Lundin Mining Ltd in 2005. The Company has completed check assaying of historical drillcore and is satisfied by the methods used and results produced by previous explorers.</p>
<b>Geology</b>	<p>∂ <i>Deposit type, geological setting and style of mineralisation.</i></p>	<p>∂ The main deposits at Pahtohavare, including the Central deposit, are classified as epigenetic copper-gold deposits.</p> <p>∂ The ore host rocks are highly altered (silica) and generally consist of a fine-grained albite felsite of granoblastic texture. Black graphitic shales appear to sit stratigraphically above the albite felsite with a gabbroic sill dominating the footwall.</p> <p>∂ The Pahtohavare ores are located within a first-order open antiformal structure which dips to the south-east. Copper-gold mineralisation is controlled by both structure and lithology.</p>
<b>Drill Hole Information</b>	<p>∂ <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p>	<p>∂ Please refer to Appendix 1, Table 1 in the main body of this announcement for all drillhole information.</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>∂ easting and northing of the drill hole collar</li> <li>∂ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>∂ dip and azimuth of the hole</li> <li>∂ down hole length and interception depth</li> <li>∂ hole length.</li> <li>∂ If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
<b>Data Aggregation Methods</b>	<ul style="list-style-type: none"> <li>∂ In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>∂ Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>∂ The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>∂ All assay results have been reported.</li> </ul>
<b>Relationship Between Mineralisation Widths and Intercept Lengths</b>	<ul style="list-style-type: none"> <li>∂ These relationships are particularly important in the reporting of Exploration Results.</li> <li>∂ If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>∂ If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>∂ PAH05002 was drilled perpendicular to the known strike of mineralisation, at an azimuth of 247°.</li> <li>∂ The dip of the mineralisation at the Central deposit appears to range between -45° to -70° with the 'lodes' generally steepening up-dip.</li> <li>∂ The downhole intervals are considered to be consistent with the true width of mineralisation.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>∂ Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>∂ No cross-section has been included in this announcement but a profile cross-section containing PAH05002 has previously been reported, please refer ASX Announcement dated 17<sup>th</sup> July 2013.</li> <li>∂ A general project location map has been included in this announcement, please refer to Figure 2.</li> </ul>
<b>Balanced Reporting</b>	<ul style="list-style-type: none"> <li>∂ Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>∂ All assay results have been reported.</li> </ul>
<b>Other Substantive Exploration Data</b>	<ul style="list-style-type: none"> <li>∂ Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density,</li> </ul>	<ul style="list-style-type: none"> <li>∂ In 2013 the Company completed a substantive historical data validation prior to releasing a maiden JORC inferred mineral resource for the deposits at Pahtohavare. The Company also completed a FLTEM geophysical survey and drilled 8 RC drillholes at the Central</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	deposit. Information on these activities can be found on the Company's website: <a href="http://www.hannansreward.com">www.hannansreward.com</a>
<b>Further Work</b>	<p>∂ <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p>∂ <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	∂ Metallurgical testing of a bulk oxide sample from the Central deposit is currently underway. Infill drilling and drill testing of down-dip and down-plunge targets has also been planned. Twin hole drilling will also need to be completed to further verify historical results.