# HANNANS

27 August 2015

#### ASX & MEDIA ANNOUNCEMENT

# Pahtohavare High Grade Copper

- Bonanza grade copper assay results received from diamond drilling at the Central deposit
- ∂ Assay highlights for PADH15005 include:
  - 14.2m @ 9.60% Cu, 2.43g/t Au, 16.98g/t Ag from 40.0m Inc. 4m @ 23.26% Cu, 3.62q/t Au, 43.03q/t Aq from 47.5m
  - 14m @ 2.03% Cu, 0.53g/t Au, 4.07g/t Ag from 7.2m Inc. 3m @ 3.58% Cu, 1.02g/t Au, 8.47g/t Ag from 10.8m
  - Highest grade 1m interval from within PADH15005 was: 31.5% Cu, 5.89 g/t Au and 63.1 g/t Ag from 50.5m Note that all widths are downhole as true widths are not currently known.
- Additional assays due during September
- Diamond drilling programme now completed (8 holes for 760m)



Figure 1: Visible copper mineralization in drillcore from PADH15005 between 48.5-49m downhole.

Hannans Reward Ltd (ASX:HNR) is pleased to announce that the first diamond drillhole assay results have been received from the Central deposit at the Pahtohavare Cu-Au Project. Pahtohavare comprises three deposits, namely Central, Southern and South Eastern and is located approximately 8km south-west of Kiruna, a full service mining town in northern Sweden (refer Figure 5).

Hannans' Swedish joint venture partner Lovisagruvan AB (AktieTorget: LOVI) is funding the costs of exploration pursuant to the Joint Venture announced to ASX on 27 March 2015 with Hannans to retain a 25% free carried interest through to a Decision to Mine. The assay results reported below have been reviewed by Mr Stefan Sädbom, Exploration Director, Lovisagruvan AB and the announcement has been approved for release by Lovisagruvan AB. The Joint Venture exploration drilling program at Central was planned and managed by Amanda Scott, Exploration Manager, Hannans Reward Ltd.



The assay results confirm PADH15005 intercepted wide copper-gold-silver mineralisation, using a 0.1% Cu cut-off, to give an intercept of:

• 53m @ 3.36%Cu, 0.89g/t Au, 6.24g/t Ag from 5.2m

Within this broader zone of copper mineralisation there are two distinct, higher grade zones of mineralisation (using a 1% Cu cut-off, 1m internal dilution).

The first high-grade interval includes:

- o 14m @ 2.03% Cu, 0.53g/t Au, 4.07g/t Ag from 7.2m
  - Inc. 3m @ 3.58% Cu, 1.02g/t Au, 8.47g/t Ag from 10.8m

The second high-grade interval includes:

- o 14.2m @ 9.60% Cu, 2.43g/t Au, 16.98g&t Ag from 40.0m
  - Inc. 4m @ 23.26% Cu, 3.62g/t Au, 43.03g/t Ag from 47.5m

Note that all widths are downhole as true widths are not currently known.

Full drillhole information is provided in Tables 1 and 2 below. Drillhole PADH15005, located on Profile 7, was drilled parallel to lithology to assist with understanding the controls on the copper mineralisation after the first two holes of the programme (PADH15001-002 located on Profiles E and 6) failed to intersect visible copper mineralisation in an interpreted down-dip position of the orebody.

Visible secondary copper mineralisation was intercepted from a downhole depth of 6.8m directly under the glacial overburden. The copper mineralisation in PADH15005 was primarily chrysocolla and malachite hosted in strongly goethite altered tuffaceous and gabbroic lithologies. In addition to the secondary copper mineralisation, primary chalcopyrite was also observed within the drillcore (refer Figure 2).



**Figure 2:** Photo on left-hand side showing pervasive secondary copper mineralization and strong iron oxide alteration. Photo on right-hand side showing primary chalcopyrite mineralization in addition to the secondary chrysocolla mineralisation. Both photos show core from PADH15005 between 48.5-50m downhole.

At 54.2m a sharp oxidation boundary (refer Figure 3) was observed and all visible copper mineralisation ceased at this contact providing direct evidence for a strong supergene control on copper mineralisation. In addition to the oxidation boundary observed in PADH15005, a leached zone is also clearly evident where the lithology is strongly kaolinised.

The extremely high-grade copper values intercepted in PADH15005 are almost certainly due to the presence of the secondary copper sulphide minerals covellite and/or chalcocite (petrographic confirmation required) which are typically found in the supergene sulphide enrichment zones of supergene orebodies. The sulphur assay values support the presence of sulphides in addition to visible chalcopyrite seen in the drillcore.



A strong supergene control of mineralisation at the Central deposit partly explains the irregularities in orebody geometry seen in the current and historic drilling, the broad mineralisation envelopes and the very high grades intercepted.

The current drilling programme has highlighted that the mineralisation at the Central deposit is much more complex (strongly deformed with intense brecciation, faulting, folding and supergene enrichment) than previously interpreted and it is anticipated that a new geological interpretation will be generated at the conclusion of the drillhole logging, receipt of all assay results and whole rock and petrographical analysis of selected samples from the current drillholes.



**Figure 3:** Photo on left-hand side showing pervasive secondary copper mineralization in the upper half and the oxidation front in the lower half; from 53.4m downhole. Photo on right-hand side showing brittle deformation within a silica-albite altered host unit (felsic tuff); from 28.5m downhole.

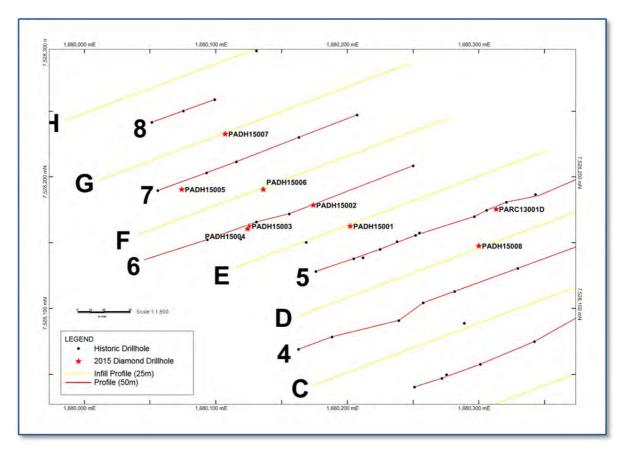


Figure 4: Location of current diamond drillholes at the Central orebody, Pahtohavare Copper-Gold Project, northern Sweden



The Central deposit contains a current JORC Compliant Inferred Mineral Resource Estimate<sup>5</sup> of 1.4Mt at 1.8% Cu and 0.6 g/t Au (2.4% CuEq<sup>6</sup>).

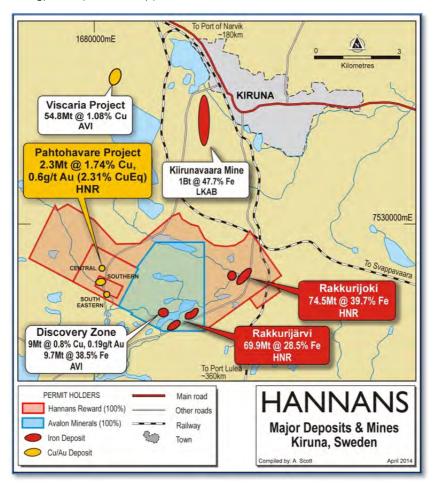


Figure 5: Location of the Pahtohavare Copper-Gold Project, northern Sweden.

For further information please contact:

Damian Hicks Managing Director +61 419 9300 087 (M) damianh@hannansreward.com (E) Amanda Scott Exploration Manager +46 703 221 497 (M) amanda@hannansreward.com (E)

#### About Hannans Reward Ltd

Hannans Reward Ltd (ASX:HNR) is an exploration company with a focus on copper, gold, nickel, PGE and iron. Hannans has JORC compliant copper, gold and iron resources in Sweden, a major Ni-Cu-PGE project in Sweden and a free-carried interest in a nickel project in Australia. Since listing on the Australian Securities Exchange in 2003 Hannans has signed agreements with Vale Inco, Rio Tinto, Anglo American, Boliden, Warwick Resources, Cullen Resources, Azure Minerals, Neometals, Tasman Metals and Grängesberg Iron. Shareholders at various times since listing have included Rio Tinto, Anglo American, OM Holdings, Craton Capital and BlackRock. For more information please visit <a href="https://www.hannansreward.com">www.hannansreward.com</a>.

<sup>&</sup>lt;sup>5</sup> Refer ASX Announcement dated 31<sup>st</sup> January 2014 for more information regarding the resource estimate including JORC Table 1 information.

<sup>&</sup>lt;sup>6</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 metallurgial testwork and previous mining.



#### **Competent Persons 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 (<a href="www.hannansreward.com">www.hannansreward.com</a>). 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 (<a href="www.hannansreward.com">www.hannansreward.com</a>). 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.



Table 1

	Easting	Northing							
Hole ID	(RT90)	(RT90)	Azi	Dip	EOH	Overb.	Core	Start	Finish
PADH15001	1680202	7528163	250	-60	106.9	6.4	100.5	24-06-15	01-07-15
PADH15002	1680174	7528179	250	-60	79.6	4.7	74.9	02-07-15	07-07-15
PADH15003	1680125	7528163	70	-51	49.9	4.8	45.1	08-07-15	09-07-15
PADH15004	1680124	7528161	70	-65	62.9	3	59.9	09-07-15	11-07-15
PADH15005	1680074	7528191	65	-55	72.1	4.2	67.9	11-07-15	15-07-15
PADH15006	1680136	7528191	250	-60	137.3	8.1	129.2	15-07-15	22-07-15
PADH15007	1680107	7528233	250	-60	76.8	2.2	74.6	22-07-15	24-07-15
PARC13001D	1680313	7528176	250	-65	235.3	RC 141m	94.3	25-07-15	31-07-15
PARC15008	1680300	7528148	250	-60	80.5	2.9	77.6	01-08-15	06-08-15

**Table 1:** Diamond drillhole collar summary for Central deposit, Pahtohavare Cu-Au Project. All coordinates are in Swedish RT90. Note PADH15008 was abandoned prior to reaching the target depth due to difficult drilling conditions.

Table 2

	Intersect	ion	Mineralis	sation		Sample
From (m)	To (m)	Intercept Down Hole (m)	Cu (%)	Au (ppm)	Ag (ppm)	Sample Type
5.20	6.20	1.00	0.10	(ppiii) 0.14	(ppiii) 2	Half Core
6.20	7.20	1.00	0.10	0.14	2.5	Half Core
		1.00	1.13	0.18	3.7	Half Core
7.20	8.20 9.20	1.00	0.68	0.57	2.2	Half Core
8.20						
9.20	10.20	1.00	1.17	0.14	1.9	Half Core
10.20	10.80	0.60	1.88	0.31	2	Half Core
10.80	11.80	1.00	4.20	0.47	6.3	Half Core
11.80	12.80	1.00	2.87	1.19	8.5	Half Core
12.80	13.80	1.00	3.68	1.41	10.6	Half Core
13.80	14.30	0.50	1.93	2.11	5	Half Core
14.30	15.30	1.00	2.21	0.61	3.1	Half Core
15.30	16.30	1.00	3.29	0.17	3.3	Half Core
16.30	17.30	1.00	1.46	0.14	2.7	Half Core
17.30	18.30	1.00	0.64	0.11	1.9	Half Core
18.30	19.30	1.00	2.06	0.34	5.2	Half Core
19.30	20.20	0.90	2.12	0.3	2.1	Half Core
20.20	21.20	1.00	1.10	0.07	2	Half Core
21.20	22.20	1.00	0.75	0.17	1.2	Half Core
22.20	23.20	1.00	0.60	0.04	1.3	Half Core
23.20	24.20	1.00	0.58	0.08	1.5	Half Core
24.20	25.20	1.00	0.45	0.19	1.3	Half Core
25.20	26.20	1.00	0.46	0.16	1.4	Half Core
26.20	27.20	1.00	0.50	0.4	1.7	Half Core
27.20	28.20	1.00	0.48	1.56	2.2	Half Core
28.20	29.20	1.00	1.13	0.66	2.9	Half Core



	Intersect	ion	Mineralis	sation		Sample
From (m)	To (m)	Intercept Down Hole (m)	Cu (%)	Au (ppm)	Ag (ppm)	Sample Type
29.20	30.20	1.00	0.20	0.18	1.5	Quarter Core-Duplicate
30.20	31.20	1.00	0.24	0.17	1.7	Half Core
31.20	32.20	1.00	0.16	0.03	1.1	Half Core
32.20	33.20	1.00	0.39	0.15	2.3	Half Core
33.20	34.20	1.00	0.38	0.16	0.5	Half Core
34.20	35.20	1.00	0.52	0.05	0.6	Half Core
35.20	36.20	1.00	0.42	0.18	1.4	Half Core
36.20	37.20	1.00	1.67	0.5	2.7	Half Core
37.20	38.20	1.00	0.51	0.43	1	Half Core
38.20	39.20	1.00	0.45	0.02	0.9	Half Core
39.20	40.00	0.80	0.79	0.07	1.3	Half Core
40.00	41.00	1.00	1.35	0.29	1.6	Half Core
41.00	42.50	1.50	6.80	3.61	11.6	Half Core
42.50	43.50	1.00	3.78	0.79	2.2	Half Core
43.50	44.50	1.00	3.39	1.51	1.2	Half Core
44.50	45.50	1.00	2.86	0.61	9.9	Half Core
45.50	46.50	1.00	3.09	0.78	4.3	Half Core
46.50	47.50	1.00	8.55	3.89	12.1	Half Core
47.50	48.50	1.00	15.35	4.39	25.6	Half Core
48.50	49.50	1.00	13.30	4.18	15.9	Quarter Core-Duplicate
49.50	50.50	1.00	32.90	Χ	67.5	Half Core
50.50	51.50	1.00	31.50	5.89	63.1	Half Core
51.50	52.50	1.00	3.26	3.29	5.7	Half Core
52.50	52.80	0.30	5.45	0.09	39.6	Half Core
52.80	53.80	1.00	4.54	3.37	1.9	Half Core
53.80	54.20	0.40	1.39	0.04	2.1	Half Core
54.20	55.20	1.00	0.82	0.01	Χ	Half Core
55.20	56.20	1.00	0.69	0.01	Χ	Half Core
56.20	57.20	1.00	0.60	0.01	Χ	Half Core
57.20	58.20	1.00	0.31	0.01	X	Half Core

**Table 2:** Detailed assay results for PADH15005. Broad copper intercept reported using a 0.1% cut-off. Narrow copper intercepts reported using a 1% cut-off and no more than 1m of internal dilution. Samples submitted to ALS Global (Piteå) for ME-ICPMS61 and Au-AA25 analysis.



## JORC Code, 2012 Edition

## Table 1, Section 1-Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. curchannels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample "representivity" and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 on mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	HQ3 diamond drill core. Quarter-core sampling utilised where a duplicate samples have been taken.  Sampling was carried out under Hannans' sampling protocols and QAQC procedures as per industry best practice.  Diamond drilling completed using HQ3 coring equipment. Drillholes have been sampled on geological intervals (0.5-2.0m). All samples have been crushed, dried and pulverised (total prep) to produce a sub sample for multi-element analysis by four acid digest with ICPMS/OES and fire assay and AAS for gold.
Drilling techniques	Orill 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 or diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	Finland. Diamond drilling completed using HQ3 (triple tube) core drilling equipment.  No core orientations have been taken.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	for every drill run. The core length recovered is physically measured for each run, recorded and used to calculate the core recovery as a percentage of core recovered. Any core loss is recorded on a core block by the drillers.  7 Triple tube drilling and the use of drilling additives has been utilised to increase core
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to delevel of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean,</li> </ul>	to the SGU Core Archive located in Malå for cleaning, reconnection of core lengths and measurement of metre marks where required, over the entire hole.  3 Geological logging has been completed on



Criteria	JORC Code explanation	Commentary
Sub- sampling techniques and sample preparation	channel, etc) photography.  The total length and percentage of the relevant intersections logged.  If core, whether cut or sawn and whether quarter, half or all core taken.  If non-core, whether riffled, tube sampled we or dry.  For all sample types, the nature, quality and appropriateness of the sample preparation technique.  Quality control procedures adopted for consub-sampling stages to maximis representative nature to the samples.  Measures taken to ensure that the sampling is representative of the in situ materic collected, including for instance results for field duplicate/second-half sampling.  Whether sample sizes are appropriate to the grain size of the material being sampled.	Scott, Hannans' Exploration Manager, who has significant experience in this style of exploration.  The lithological, alteration and structural characteristic of the core a logged in digital format and following established procedures.  All data is subsequently imported into Hannans' Datashed database located in Perth.  All drillholes are photographed.  All samples delivered to ALS Global in Malawhere the core was cut and sampled.  All samples are half-core except for duplicate samples in which case quarter-core samples have been taken.  The sample preparation follows industry best practice sample preparation; the samples are finely crushed with 70% passing <2mm therefore reduced in a splitter whereby a reject sample and a 250g sample is produced. The 250g sample is then pulverised with 85% passing <75 microns which completely homogenises the sample. A sub-sample of pulp is taken for digestion in a four acid digest and fire assay for gold.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness the assaying and laboratory procedure used and whether the technique considered partial or total.</li> <li>For geophysical tools, spectrometer handheld XRF instruments, etc., the parameters used in determining the analysincluding instrument make and moder reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedure adopted (eg standards, blanks, duplicate external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	digest multi-element suite with ICPOES of ICPMS finish. The acids used are hydrofluoric nitric, hydrochloric and perchloric with the method approaching near total digest for most elements.  All samples are assayed for gold by firing a 25g sample with an AAS finish.  The analytical methods are considered appropriate for this style of mineralisation.  No geophysical tools or handheld instruments were utilised in the preparation.



Criteria	JORC (	Code explanation	Cc	ommentary
				limits.
			<i>∂</i>	Laboratory QAQC methods include the insertion of certified reference material standards, blanks, and duplicates.
Verification of sampling and assaying	eiti per d The d Doo pro (pt	e verification of significant intersections by her independent or alternative company rsonnel.  e use of twinned holes.  cumentation of primary data, data entry ocedures, data verification, data storage hysical and electronic) protocols.  scuss any adjustment to assay data.	<ul><li>∂</li><li>∂</li><li>∂</li><li>∂</li></ul>	Determination of the reported downhole interval of mineralisation has not been verified by either independent or alternative company personnel in person but has been reviewed by the Chief Geologist, Stefan Sädbom, of the Joint Venture partner via electronic photographic data.  None of the drillholes referred to in this release have been twinned to date.  All geological and location data is currently stored in Hannans' Excel database files. Data entry has been by manual input and validation of the small amount of data has been done by checking input on screen prior to saving. All data will be forwarded to the database administrator in Perth for loading and validation into Hannans' Datashed database.  No adjustments or calibrations have been made to any assay data used in this report.
Location of data points	loc sur loc est d Spe d Qu	curacy and quality of surveys used to cate drill holes (collar and down-hole reveys), trenches, mine workings and other cations used in Mineral Resource timation. ecification of the grid system used. rality and adequacy of topographic introl.	<ul><li>∂</li><li>∂</li><li>∂</li><li>∂</li><li>∂</li></ul>	Drillhole locations have been planned using a combination of GIS software packages.  Drillhole locations have been determined using a Garmin handheld GPS unit with an accuracy of +/- 1m. Drill azimuths were laidout with a hand-held Suunto compass that has a precision of +/- 0.5 degrees.  Downhole surveys have been completed using a gyroscopic instrument at regular intervals.  Grid system is Swedish Coordinate system RT90 2.5 west.  Topographic control has been established by previous surveying of historic drillhole collars by RTK GPS. This data has been used to calibrate the Hannans' handheld GPS.
Data spacing and distribution	Residence of the surface of the surf	ta spacing for reporting of Exploration sults. The there the data spacing and distribution is efficient to establish the degree of cological and grade continuity appropriate the Mineral Resource and Ore Reserve timation procedure(s) and classifications plied. The there is a maple compositing has been plied.	<ul><li>∂</li><li>∂</li><li>∂</li></ul>	The current data spacing or drill profile separation is approximately 25-50m, hole spacing varies depending on the purpose of the drillhole but is typically 20-30m between holes within a drill profile.  The data spacing and distribution is considered sufficient to establish a degree of geological and grade continuity.  No sample compositing has been applied.
Orientation of data in relation to geological structure	∂ Wh ach stru kna	nether the orientation of sampling hieves unbiased sampling of possible uctures and the extent to which this is own, considering the deposit type.  the relationship between the drilling	<i>∂</i>	The majority of drillholes drilled at the Central deposit have been drilled perpendicular (250°) to the interpreted dip of the lithology. PADH15005, the subject of this report, however has been drilled parallel



Criteria	JC	RC Code explanation	Co	Commentary		
		orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	ð	(070°) to the interpreted dip of the lithology to determine the down-dip control on mineralisation. Results of PADH15005 have indicated that there is a strong supergene control on mineralisation.  The reported mineralised intercept from PADH15005 is a downhole width and not a true width. The intercept reported may not represent the true width and should be taken within the context described in the preceding point.		
Sample security	∂	The measures taken to ensure sample security.	<i>∂</i>	All drill core transport and logging has been completed by Amanda Scott, Hannans' Exploration Manager. All holes are stored in a locked facility.		
Audits or reviews	д	The results of any audits or reviews of sampling techniques and data.	д	No external audits or reviews of the sampling techniques and data have been completed.		

# Section 2-Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	7ype, 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.	The Central deposit is located on exploration permit Pahtohavare nr 2 owned 100% by Hannans' fully owned Swedish subsidiary Kiruna Iron Ab. The permit is located approximately 8km to the southwest of the town of Kiruna, northern Sweden.
	∂ 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.	In March 2015 Hannans entered into a Joint Venture Agreement with Swedish mining company Lovisagruvan Ab at the Pahtohavare Project. The JV is staged but Hannans will retain a 25% free carried interest through to a decision to mine.
		Exploration permit Pahtohavare nr 2 is in good standing with the local mining authority, Bergsstaten.
Exploration done by other parties	∂ Acknowledgment and appraisal of exploration by other parties.	Historical diamond drilling was completed by SGU (Swedish Geological Society) in the late 1980's. From this drilling selected holes have been check assayed by Hannans. In 2013 Hannans released a JORC Inferred Mineral Resource Estimate for the Central deposit and also completed an 8-hole RC programme. Hannans is satisfied with the previous QAQC and assay methods used by SGU.
Geology	Deposit type, geological setting and style of mineralisation.	The mineralisation at the Central deposit has been classified as epigenetic copper-gold. Whilst the ore appears to be preferentially located within a brecciated, highly altered



Criteria	JORC Cod	e explanation	Co	ommentary
				(silica-albite) and oxidised felsic tuff, recent drilling (RC in 2013 and current diamond drilling) by Hannans has shown that copper mineralisation also occurs in the black graphitic shales sitting stratigraphically above the felsic tuff and also in the mafic sill (gabbro) which dominates the footwall. It has become apparent from the current drilling programme that there is a strong supergene control on mineralisation in addition to lithological and structural controls. A new geological interpretation is required for the Central deposit as a result of the current drilling.
Drill hole Information	the u results following holes:  a eas coling ele ele of to dep	vation or RL (Reduced Level – vation above sea level in metres) the drill hole collar and azimuth of the hole vn hole length and interception	2	Refer to Table 1 & 2 of this report for a summary of all appropriate drillhole information.
Data aggregation methods	<ul> <li>∂ In reposition average minimum high gusually</li> <li>∂ Where short is longer proceed should examp shown</li> <li>∂ The asset</li> </ul>	orting Exploration Results, weighting ing techniques, maximum and/orum grade truncations (eg cutting of grades) and cut-off grades are Material and should be stated.  aggregate intercepts incorporate lengths of high grade results and lengths of low grade results, the lure used for such aggregation be stated and some typical les of such aggregations should be in detail.  sumptions used for any reporting of equivalent values should be clearly	<ul><li>∂</li><li>∂</li><li>∂</li><li>∂</li></ul>	High-grade significant intercepts in this report are based on ≥ 1% Cu and include up to 1m of internal dilution.  The lower-grade, wider significant intercept in this report is based on a 0.1% Cu lower cut-off grade and up to 1m of internal dilution.  No high-grade cut-off has been used in this report.  Length-weighted averaging has been used to calculate all intercepts in this report. Length-weighted averaging has been used given that sampling intervals were determined geologically and not always nominally.  No metal equivalents have been used in this report.
Relationship between mineralisation	∂ These importe Results	relationships are particularly ant in the reporting of Exploration :.	ð	The reported mineralisation intercepts are downhole widths and not true widths, which are unknown at this



Criteria	JO	RC Code explanation	Cc	ommentary
widths and intercept lengths	0	If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.  If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	∂ ∂	time. The geometry of the mineralisation whilst historically has been interpreted to dip between 50-70° towards the east, the current drilling programme has shown that a supergene effect maybe more pronounced than originally interpreted and as such the orientation of the mineralisation at the Central deposit is not fully understood. PADH15005, the subject of this report, has been drilled parallel to the interpreted dip of the lithology to aid in determining the down-dip controls on mineralisation.
Diagrams	ð	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.	ð	Appropriate maps, photographs and tabulations are included in the main body of this report.
Balanced reporting	ð	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.	ð	The report provides the total information available to date and is considered to represent a balanced report.
Other substantive exploration data	<i>∂</i>	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, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	<i>∂</i>	Previous exploration results, including the JORC Inferred Mineral Resource Estimate for Pahtohavare, have been previously reported. No other exploration data is considered material at this stage.
Further work	∂ ∂	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	∂ ∂	The current diamond drilling programme at the Central deposit has now been concluded. All results will be reported as they come to hand.  Metallurgical testwork of oxide material from the Central deposit is currently in progress with results expected imminently.