Memo Nordic Iron Ore AB

13001 Ludvika Mines – Mineral resource update

Summary

Mineral resources have been estimated for Nordic Iron Ore's (NIO) project Ludvika Mines at Blötberget and Finnäset-Väsman. The resource estimates are based on a total of 14260m diamond drilling from 2012 and a large number of historical drill holes, after due confirmation of their usability for mineral estimation.

NIO has previously reported the mineral resources of Ludvika Mines, including the historical Blötberget and Håksberg mines, no recent estimate has, however, been reported for the Finnäset-Väsman targets. The resource tables below are thus to be seen in addition to what has been reported previously.

The effective date on this resource estimate is January 10, 2013.

Blötberget	Tonnage [Mton]	Grade Fe [%]	Grade P [%]	Grade S [%]
Measured	--	--	--	--
Indicated (*)	15.9	46.1		
Inferred	--	--	--	--

(*) Combined resources of Flygruvan 7.4 Mton @ 41.4 % Fe and Kalvgruvan 8.5 Mton @ 50.2% Fe.

Table 1: Mineral Resources at Blötberget, on January 10, 2013.

Finnäset-Väsman	Tonnage [Mton]	Grade Fe [%]	Grade P [%]	Grade S [%]
Measured	--	--	--	--
Indicated	7.0	38.5	0.07	0.00
Inferred (*)	78.1	38.3	0.05	0.02
Inferred (**)	7.8	39.7	--	--

(*) Finnäset-Väsman, western limb
(**) Lyviksberget

Table 2: Mineral Resources at Finnäset-Väsman, on January 10, 2013.

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Introduction

GeoVista AB has been commissioned by Nordic Iron Ore AB (NIO) to conduct independent resource estimation on the Blötberget and Finnäset-Väsman iron ore deposits located in the Ludvika area of the Swedish Bergslagen region. In addition, a comment on the previously reported mineral resources for the Håksberg mine was requested.

The work has been carried out by Mr Thomas Lindholm, MSc., acting as an independent "Competent Person". Mr. Lindholm is a fellow member of the Australasian Institute of Mining and Metallurgy (Member #230476) and qualified to be a Competent Person as defined by the JORC Code on the basis of training and experience in the exploration, mining and estimation of mineral resources of gold, base metal and iron deposits. The mineral resources of the Blötberget and Finnäset-Väsman iron ore deposits have been prepared and categorised for reporting purposes by Mr. Lindholm, following the guidelines of the JORC Code.

All the work described below was carried out in Gemcom Surpac, version 6.3.2.

All units used in this report are metric.

Figure 1. Ludvika Mines location map.

Exploration history

Historically, the iron ores of the project has been known to exist for hundreds of years, mining has been ongoing more or less continuously until 1979, when operation at Blötberget and Håksberg ceased. Operation at the smaller mines at Lake Väsman ceased well before that, the last known activities consisted of test mining at Lyviksberget in the early 1960's.

Plenty of historical information in the form of mine maps, sections, assay records as well as drill core exists in storage at the Mining Inspectors office and at the Geological Survey's archives.

Previous work

The mineral resources for Blötberget and Håksberg have previously been estimated and reported by NIO, based on compilations of historical data from the previous period of

mining activities. The reported resources have later been confirmed and reported by GeoVista AB based on a campaign of re-logging and re-assaying historical drill core.

Approximately 5130 m of drill core from the Blötberget mine, 1300 m from Håksberg and 1430 m from the Väsman area have, so far been re-logged and re-assayed for confirmatory purposes. Historical core is stored at the Geological Survey core repository in Malå, all logging was carried out at their premises.

The results of this campaign of re-logging and re-assaying has been reported earlier by GeoVista, in summary they confirm the usability of the historical material.

Current exploration program

The current exploration program has been aimed both at investigating the assumed down-dip extensions of Kalvgruvan and Flygruvan at Blötberget and to investigate the strong magnetic anomalies located under Lake Väsman. NIO has earlier reported an Exploration Target of 600-650 Mt with 28-30% Fe in magnetite for this area.

The drilling at Blötberget has managed to extend the interpretation of Kalvgruvan and Flygruvan further down-dip.

The results from the drilling programme at Lake Väsman confirm the magnetic survey work carried out by the SGU and NIO, that the mineralised zones of the Håksberg mining camp continues under the lake all the way down to the south shore of the lake to Finnäset.

The investigation under the lake has necessitated drilling long, gently dipping holes from the eastern shore as well as from a barge towed to location and anchored on the lake.

Current drilling, core handling, sample preparation and assaying

The most recent drilling was carried out by the Swedish contractor Drillcon Core AB, or by their Finnish subsidiary Suomen Malmi Oy, using wireline 56, recovering 39 mm drill core. Two holes have been drilled for metallurgical sampling, using HQ dimension to recover 63.5mm core. Eight of the holes (2883m) have been drilled with oriented core to provide better structural information. Six of the holes have been subject to test pumping to provide information on the potential for water bearing fracture zones.

All core has been kept at the drill rigs until recovered by NIO technicians or geologists and transported to the core logging facility in Grängesberg.

NIO staff has logged the core using industry practice routines as established in NIO's Quality Manual. This includes core recovery, RQD, lithological logging and photography (wet and dry). In addition, core has been tested for point load to assess rock mechanical properties. Oriented core has been use to give 3D information on joint sets.

The geologist marked the assay section on to the core box as well as on the core and inserted a sample ticket in the core box before the core was split by diamond sawing.

Split core was dried and put in plastic bags together with the sample ticket. The bag was again marked with the sample ID and sealed with cable ties. Samples were transported by Bussgods to ALS facility in Piteå for crushing and milling.

Ampoules of approximately 250g of ground sample pulp were then forwarded for assaying.

The assays have been carried out by ALS Global in Vancouver, using either of ME-XRF11b, ME-XRF15b or ME-XRF21n, depending on when in time they were done and whether they were suspected of containing larger amounts of sulphide minerals or not. All three methods are considered appropriate for iron ore projects.

Bulk density determination and density assignments

The bulk density has been determined for most assay sections, using Archimedes principle of first weighing the sample dry, and then submerged in water.

The densities were determined on split core, with samples weighing approximately 1000g or more, thus giving better representativity of the section and consequently a smaller spread when plotted against the grade of Fe.

The density has been estimated from 342 sections from Blötberget and 530 sections from Finnäset-Väsman. Models of density as a function of Fe-contents were developed as shown below in Figures 2 and 3.

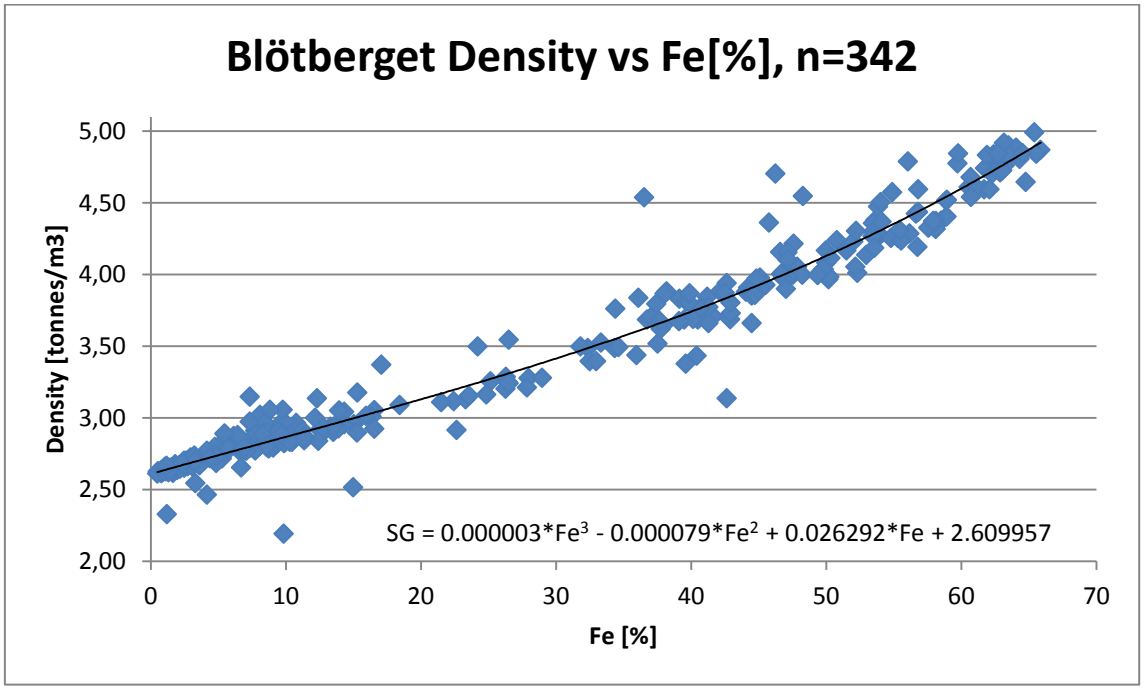

Figure 2, Specific Gravity versus Fe for Blötberget.

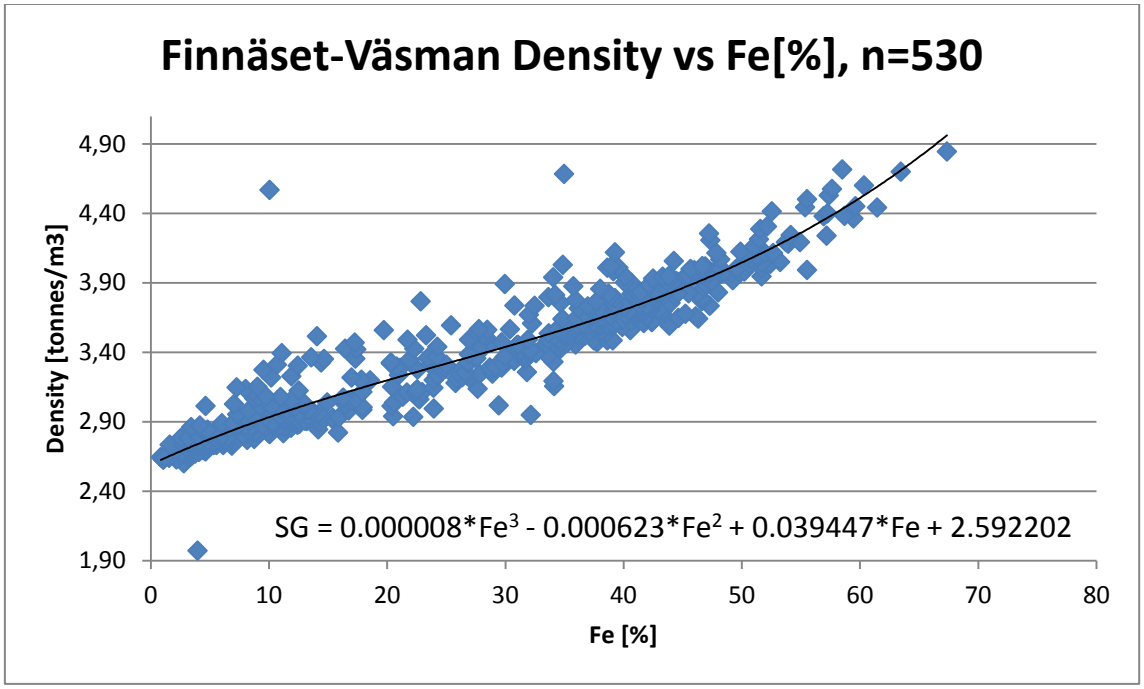

Figure 3, Specific Gravity versus Fe for Väsman.

Data verification

The collar locations as well as initial azimuths for all holes drilled on land have been surveyed with RTK GPS, giving a precision of +/- 15mm. Holes drilled from the barge have had the collar location checked with handheld GPS, using stacking of data during several minutes, to get good positional data.

QA/QC

Samples for quality assurance and quality control have been inserted, on average, one every 20 samples. Check samples have consisted of certified standards, blanks and duplicates of previously assayed samples. No anomalies have been discovered in these results.

Geological interpretation

<u>Blötberget</u>

The mine field of Blötberget extends 1.2 km in ENE direction. The Kalvgruvan and Flygruvan (magnetite resp hematite) mineralisation is found in the SW, Hugget, Betsta (both magnetite and hematite), and Sandell (magnetite) in NE. The sedimentary ore horizons are thickest in the SW, on average 20-25m in Kalvgruvan and Flygruvan, while 5-10m thick in NE in Hugget/Betsta. The ore horizon is irregularly interlayered by pegmatite and mafic dikes. Dip at the surface is 50-55 degrees, further down the ore bodies are flattening to approximately 25 degrees at 500 below the surface.

The interpretation of the mineralised zones are therefore based on the geological models, but applying a 20% Fe cut-off grade for defined mineable sections (generally assumed to be a minimum of 6m thick).

The wireframes representing the interpreted down-dip extensions of Kalvgruvan and Flygruvan respectively have been created by triangulation of their intercepts in the drill holes. Based on the continuity established, these surfaces have been expanded 100m out around their respective perimeter to form the shape of the respective mineralisation.

The mineralised bodies are approximately 600m long down-dip and approximately 400m long along strike. The thickness of Flygruvan varies from 6-7m up to 20m; Kalvgruvan varies from approximately 10m up to 30m in thickness.

Figure 4 shows the two mineralisation in relation to what was previously interpreted and reported as mineral resources for Blötberget.

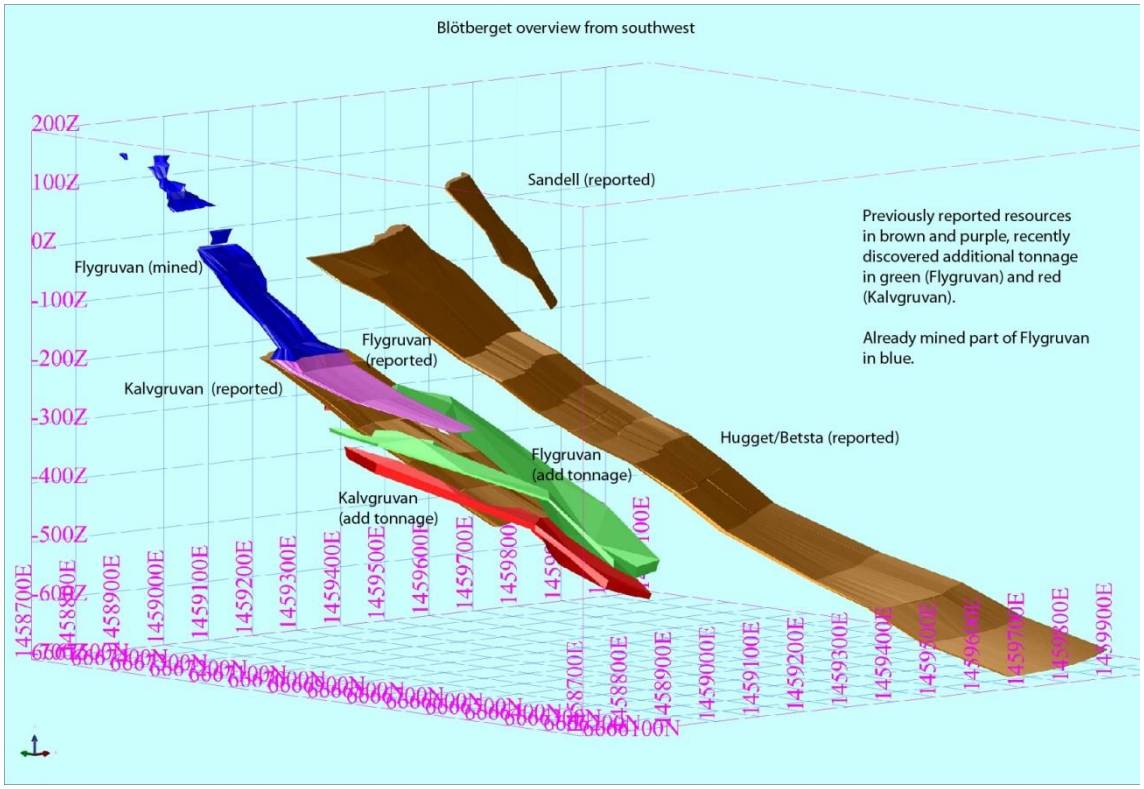

Figure 4, Additional tonnage at Flygruvan (green) and Kalvgruvan (red) in relation to previously reported tonnage.

Finnäset-Väsman

The investigated magnetic anomalies at Lake Väsman connect an area of historical mining on the south shore of the lake with the historical Håksberg mine camp. A number of shorter historical holes have been drilled to investigate these anomalies at an earlier date, the results of which have been incorporated into the current database when recovery and verification of the information has been possible. The location of current drill holes has been guided by knowledge from the historical information.

The mine field extends from Finnäset in SW up to Iviken in NE, with a total length of 3km. Most of it is found under Lake Väsman. The ore consists predominantly of magnetite in biotite quartzite or in mica schist, in places the magnetite ore contains hematite. In comparison to the geology of Blötberget, the mine field in Väsman and Finnäset contains more skarn (alteration mineral composition). Occasionally the ore horizon is chert banded. The dip of the ore bodies in the field is approximately 70-80 degrees.

The wireframes representing the mineralisation have been constructed on vertical sections and connected, using geological continuity as a guide, to form solids.

A total of 4 mineralised domains have been modelled on the western limb, their depth extensions vary from approximately 300m in the south down to approximately 550m in the center of the anomalous zone. Their thicknesses vary from 6-8 m up to over 40m.

The investigations on the eastern limb, where the mine investigation at Lyviksberget was carried out by Ställbergsbolaget in the late 1950's to early 1960's, resulting in the interpretation of one mineralised body. In this part of the system, the mineralisation are not outcropping but starts at approximately 100m below surface.

It should be noted that only a small portion of the Väsman mineralised area, containing the previously reported exploration target, has been investigated in the current campaign, and mostly to shallow depths. The interpreted mineralisation are all open towards depth.

In an initial assessment, it is estimated that an additional 9000-10000m of diamond drilling is necessary to investigate the remaining parts of the anomalous areas.

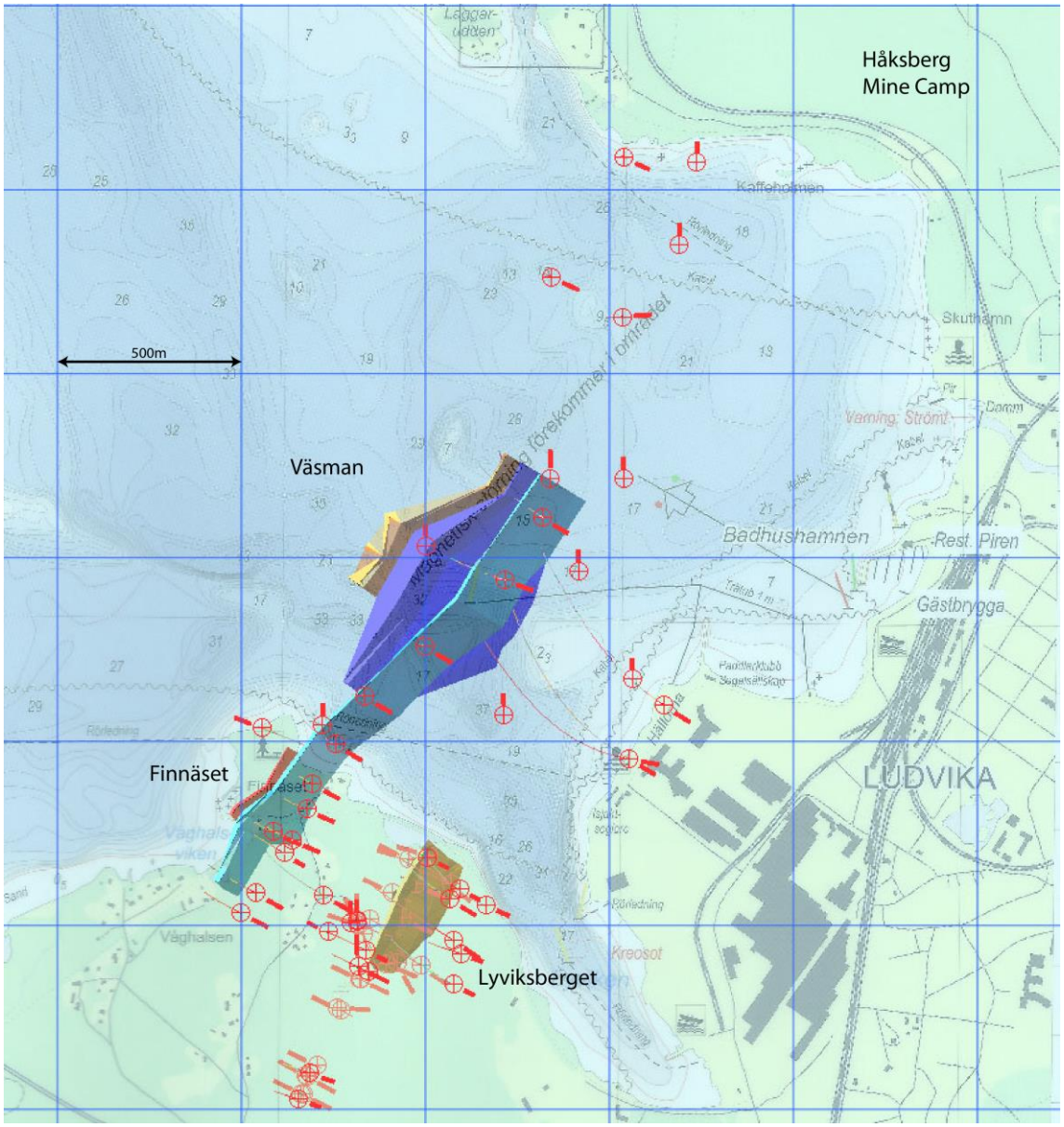

Figure 5, Mineralised zones at Finnäset-Väsman

Mineral resource estimates

The mineral resources for Blötberget have been reported previously, the current report is focussed on reporting the additional resources, which have been encountered in the current drill campaign.

No recent attempts have been made to estimate the resources at Finnäset-Väsman before the current one.

Usable variograms for the deposits could not, as yet, be developed, the interpolation is therefore carried out using Nearest Neighbour, in combination with search parameters based on the authors' experience.

The search ellipses were oriented in parallel with the strike and dip of the mineralised lenses.

The length of the recent assay sections is variable, but in general 2m. All sections have been composited to 5m length before being used in the evaluation of the deposits.

Block models

Blötberget

A block model was developed for the Flygruvan-Kalvgruvan mineralisation at Blötberget. The block model utilises regularly shaped blocks measuring 20*20*5m (X*Y*Z). The block sizes are judged to be the most appropriate considering the geometry of the mineralisation, the distribution of sample information as well as the expected size of the mining blocks. To better conform to the mineralisation's contacts, sub-blocking down to ¼ side length was used. The block model is not rotated. Block grades were estimated for parent cells and distributed to their sub-blocks. Block model grade interpolation was performed using Nearest Neighbour, with a maximum search radius of 225m.

Each mineralised domain (Flygruvan and Kalvgruvan respectively) has been interpolated using samples/composites only from within it.

The block model validation includes a visual inspection of block grades versus composite values on vertical sections. This did not show any deviations when compared with the grades from the drill holes across sections.

The distribution of block values was compared to the distribution of composite values and found to have reasonable similarities.

Finnäset-Väsman

One block model was developed for the mineralisation encountered at the western limb at Finnäset-Väsman. The block model utilises regularly shaped blocks measuring 10*25*25m (X*Y*Z). The block sizes are judged to be the most appropriate considering the geometry of the mineralisation, the distribution of sample information as well as the expected size of the mining blocks. To better conform to the mineralisation's contacts, sub-blocking down to ¼ side length was used. The block model is rotated, with its orientation N40°E, to better conform to the orientation of the mineralisation. Block grades were estimated for parent cells and distributed to their sub-blocks. Block model grade interpolation was performed using Nearest Neighbour, with two passes utilizing search radii of 225m and 400m respectively.

Another block model was developed for the mineralisation at Lyviksberget. The block model utilises regularly shaped blocks measuring 5*20*20m (X*Y*Z). The block sizes are judged to be the most appropriate considering the geometry of the mineralisation, the distribution of sample information as well as the expected size of the mining blocks. To better conform to the mineralisation's contacts, sub-blocking down to ¼ side length was used. The block model is rotated, with its orientation N25°E, to better conform to the orientation of the mineralisation. Block grades were estimated for parent cells and distributed to their sub-blocks. Block model grade interpolation was performed using

Inverse Distance squared, with three passes utilizing search radii of 75m, 150m and 250m respectively.

Each mineralised domain has been interpolated using samples/composites only from within it.

The block model for Finnäset-Väsman contains the elements Fe, P and S. For Lyviksberget, only Fe was modelled.

No top-cut has been applied for the interpolation of Fe, for P a top-cut of 0.1 % was applied and for S the corresponding value was 0.2%.

The block model validation includes a visual inspection of block grades versus composite values on vertical sections. This did not show any deviations when compared with the grades from the drill holes across sections.

The distribution of block values were compared to the distributions of composite values and found to have reasonable similarities.

Mineral Resource Classification

Mineral resources were estimated following the guidelines of the Australasian Code for Reporting of Mineral Resources and Ore Reserves prepared by the Joint Ore Reserve Committee in 2004 (JORC Code, see http://www.jorc.org/). The mineral resources are summarised in Tables 1 and 2. The following definitions were adopted for the categorisation of mineral resources:

Measured Mineral Resources

No part of the mineralisation has been classified as Measured Mineral Resources.

Indicated Mineral Resources

For Blötberget, with a typical drill spacing of 100-125m or better, the entire mineral resource is classified as Indicated based on the demonstrated geological continuity.

For Finnäset-Väsman, only the portion of the denser drilled mineralisation found on land, at Finnäset, where a typical drilling density of 50-100m was used, would have the demonstrated geological continuity that merits the classification Indicated.

Inferred Mineral Resources

The mineralisation found under Lake Väsman has been drilled with a density of 100-200m, all modelled resources have been classified as Inferred mineral resources.

Blötberget	Tonnage [Mton]	Grade Fe [%]	Grade P [%]	Grade S [%]
Measured	--	--	--	--
Indicated (*)	15.9	46.1		
Inferred	--	--	--	--

(*) Combined resources of Flygruvan 7.4 Mton @ 41.4 % Fe and Kalvgruvan 8.5 Mton @ 50.2% Fe.

Table 1: Mineral Resources at Blötberget, on January 10, 2013.

The mineral resources reported above for Blötberget are in addition to earlier reported ones, comprising 13.9 Mton Indicated resources at 42.6% Fe and 10.2 Mton Inferred resources at 42.9% Fe, both reported at 30% Fe cut-off.

Note that the additional resources, currently reported, are based on a 20% Fe cut-off whereas the previously reported ones are based on a 30% Fe cut-off, they are therefore not directly comparable.

Finnäset-Väsman	Tonnage [Mton]	Grade Fe [%]	Grade P [%]	Grade S [%]
Measured	--	--	--	--
Indicated (*)	7.0	38.5	0.07	0.00
Inferred (**)	78.1	38.3	0.05	0.02
Inferred (***)	7.8	39.7	--	--

(*) Finnäset, land based

(**) Finnäset-Väsman, western limb, all under the lake Väsman

(***) Lyviksberget (Ställbergsbolagen testmine)

Table 2: Mineral Resources at Finnäset-Väsman, on January 10, 2013.

The mineral resource estimate is based upon the following key inputs and assumptions:

1. Mineral resources of the Blötberget and Finnäset-Väsman iron ore deposits have been prepared and categorised for reporting purposes by Mr. Thomas Lindholm, MAusIMM, of GeoVista AB, following the guidelines of the JORC Code. Mr Lindholm is qualified to be a Competent Person as defined by the JORC Code on the basis of training and experience in the exploration, mining and estimation of mineral resources of ferrous deposits.
2. The effective date of this statement is January 10, 2013.
3. The Blötberget and Finnäset-Väsman mineral resources are defined primarily by diamond core drilling. Drilling was conducted on grids with a general density of 100-125m (Blötberget) and 50-100m up to 200m (Finnäset-Väsman).
4. The mineralisation is defined using a cut-off of 20% Fe, permitting the inclusion internal waste.
5. The mineralisation is modeled into 2 domains for Blötberget and 4 domains for Finnäset-Väsman.

6. Drill core samples were assayed with XRF by ALS Global. Average sample section length is 2.0 m. All assay sections have been regularized to 5m composites using Surpac's "best fit" option.
7. Block grades were interpolated for all the modeled elements using Nearest Neighbour with the exception of Lyviksberget, where Inverse Distance squared was used.
8. Bulk densities of the mineralisation were calculated as a function of the interpolated grades of Fe.
9. No part of the mineral resources are classified as Measured mineral resources.
10. The mineral resources at Blötberget as well as the Finnäset part of the resources at Finnäset-Väsman are classified as Indicated mineral resources.
11. The mineral resources found under Lake Väsman are classified as Inferred mineral resources.

Conclusions and recommendations

There are no indications that the mineralisation at Kalvgruvan and Flygruvan are terminated at the extent of the current interpretation, further drilling, on strike as well as down the dip, is therefore recommended. The area in between Kalvgruvan and Flygruvan and Hugget/Betsta is only briefly investigated, it is considered likely that the two are connected at depth, and that this needs to be investigated further.

The results achieved so far at Finnäset-Väsman are generally from shallow holes and the extent of the interpretation towards the depth is consequently conservative. A set of drill holes to investigate the deeper parts is therefore recommended.

The exploration target previously declared for Lake Väsman has only been briefly investigated and verified by the program currently reported. Based on these results it is likely that further investigations will render a huge additional tonnage. In an initial assessment, it is estimated that an additional 9000-10000m of diamond drilling is necessary to investigate the remaining parts of the anomalous areas.

References

Larsson M., (2012) Geological Logging and Sampling of Archive Cores at the Central Core Archive in Malå.

Lindholm T. (2011) GVR11046 Blötberget and Håksberg mineral resource verification.