

## Hautalampi Ni-, Cu-, Co-Deposit Mineral Resource Estimate, Outokumpu, Finland

**Prepared for FinnCobalt Oy.**

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**Effective date:** June 21<sup>st</sup>, 2021

**Execution Date:** July 2<sup>st</sup>, 2021



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## 1 Summary

### 1.1 Introduction

FinnCobalt Oy commissioned AFRY Finland Oy (AFRY) to prepare a mineral resource estimate on the Hautalampi and Mökkivaara Ni-Cu-Co deposits. The estimate has been prepared and reported in accordance with the recommendations of the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC 2012).

This mineral resource estimate is based on the data collected and prepared for the Technical report for the Hautalampi Co-Ni-Cu deposit in 2009 (Finn Nickel Oy) and on the FinnCobalt drilling campaign from 2020. This report has an effective date of June 21<sup>st</sup>, 2021.

The estimate was completed by Ville-Matti Seppä who is a Competent Person as defined by the Australasian Code for the Reporting of Mineral Resources and Ore Reserves (JORC Code) 2012 Edition.

### 1.2 Location

The Hautalampi property is located at Latitude 62.7151 °N, Longitude 28.9730 °E in the Outokumpu municipality, eastern Finland, about 2 km southwest of the town centre of Outokumpu, about 45 km WNW of the city of Joensuu, and about 350 km NE of Helsinki.

### 1.3 Ownership and History

The project is in the historic Keretti mine site, previously developed and operated by Outokumpu Oy. Suomen Nikkeli Oy (Finn Nickel Oy) acquired a 100% interest in the property in 2007. Followed by a Finn Nickel bankruptcy in 2009 the mineral rights and the ground together with the Luikonlahti plant was purchased from the Finn Nickel bankruptcy estate by Vulcan Resources Pty Ltd. Hautalampi asset was sold to Vulcan Hautalampi Oy in September 2016. In May 2020 FinnCobalt Oy (formerly Vulcan Hautalampi Oy) agreed on the farm-in agreement with Eurobattery Minerals AB, where Eurobattery agrees to finance future development of the company and subsequently earns the right to purchase all FinnCobalt Oy shares.

The property is covered by valid FinnCobalt mining concession 7802/1. The total area of the mining concession is 283.5 hectares.

### 1.4 Geology and Mineralization

The geological setting of the Hautalampi mineralisation is the same as that for the main Keretti Cu- rich ore, the main differences being in the localisation of

the mineralised zone within the Outokumpu stratigraphy, and the nature of the mineralised body itself.

Mineralisation mainly occurs as disseminations in bands due to metamorphism. The mineralised zone has in sometimes a very sharp contact with the wall rocks. However, in many places, a transitional zone from one meter up to three meters occurs between the mineralised zone and wall rocks.

## 1.5 Project Status

The Hautalampi Project is an advanced exploration project that has seen extensive exploration throughout the years. The recent development includes core drilling for metallurgical sampling 2017-2018, which was followed by the flotation test work by GTK Mintec laboratories. Commercial grade Cu- and Ni-Co-concentrates were produced. Further Ni-Co-concentrate leaching test work aiming for battery chemicals production was done by Outotec Oyj. All test work succeeded well and confirmed that Hautalampi mineralisation is suitable for battery chemicals production.

The deposit has an Environmental Permit for underground mining in force and Mining Lease appropriation is ongoing. Autumn 2020 the company decided to commence a new Environmental Impact Assessment for the project including underground mining and on-site ore processing and battery chemicals production plant.

## 1.6 Mineral resource estimates

The data that has been used for this work has been collected and compiled during the last mineral resource estimate work done by Outotec (Finland) Oy, dated 15<sup>th</sup> March 2009, and from the latest drilling campaign conducted by FinnCobalt Oy in 2020.

The estimate has been prepared and reported in accordance with the recommendations of the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC 2012).

The Mineral resource estimates at Hautalampi and Mökkivaara are presented below (Table 1-1, Table 1-2, and Table 1-3).

*Table 1-1 Hautalampi Mineral Resources as of the June 21<sup>st</sup>, 2021 @ 0.3% NiEq cut-off*

<b>Hautalampi</b>						
	Tonnes (t)	Ni %	Cu %	Co %	Ni Eq %	Cu Eq %
Measured	2 582 000	0.38	0.28	0.08	0.72	1.67
Indicated	2 701 000	0.31	0.20	0.08	0.61	1.42
total M&I	5 283 000	0.35	0.24	0.08	0.66	1.54
Contained Metals	tonnes	18289	12783	4337		

*Table 1-2 Hautalampi Inferred Mineral Resources as of the June 21<sup>st</sup>, 2021 @ 0.3% Ni Eq cut-off*

<b>Hautalampi</b>						
	Tonnes (t)	Ni %	Cu %	Co %	Ni Eq %	Cu Eq %
Inferred	195 000	0.26	0.14	0.05	0.45	1.04
Contained Metals	tonnes	505	267	98		

*Table 1-3 Mökkivaara Inferred Mineral Resources as of the June 21<sup>st</sup>, 2021 @ 0.3% Ni Eq cut-off*

<b>Mökkivaara</b>						
	Tonnes	Ni %	Cu %	Co %	Ni Eq %	Cu Eq %
Inferred	2 186 000	0.25	0.16	0.06	0.46	1.07
Contained Metals	tonnes	5410	3509	1218		

## 1.7 Conclusions

The following remarks and conclusions regarding the Hautalampi project are summarized below:

- The drilling and sampling to date support the mineral resources estimate and there is sufficient information to be used as a basis for the mineral resource estimate.
- The drilling pattern and spacing cover the known measured, indicated, and inferred mineral resources. A limited amount of new drilling down-dip of the historic drilling could upgrade the indicated and inferred resources.
- The deposit geology and style of mineralization are well understood, and the property has a history of successful mining activities. However, the Mökkivaara area needs more consideration to upgrade the resource class.
- Based on the mineral resource estimate, the project is well suited to proceed to the next study phase.

### **Cautionary Note Regarding Forward-looking Information and Statements**

Information and statements contained in this Report that are not historical facts are "forward-looking information" or "forward-looking statements" within the meaning of Canadian securities legislation and the U.S. Private Securities Litigation Reform Act of 1995 (hereinafter collectively referred to as "forward-looking statements") that involve risks and uncertainties. Examples of forward-looking statements in this Report include information and statements with respect to: FinnCobalt plans and expectations for the Hautalampi Project, estimates of mineral resources, and possible related discoveries or extensions of new mineralization or increases or upgrades to reported mineral resources estimates and budgets for recommended work programs.

In certain cases, forward-looking statements can be identified by the use of words such as "budget", "estimates", or variations of such words or state that certain actions, events or results "may", "would", or "occur". These forward-looking statements are based, in part, on assumptions and factors that may change, thus causing actual results or achievements to differ materially from those expressed or implied by the forward-looking statements. Such factors and assumptions include, but are not limited to, assumptions concerning base metal prices; cut-off grades; accuracy of mineral resource estimates and resource modelling; reliability of sampling and assay data; representativeness of mineralization; accuracy of metallurgical test work and timely receipt of regulatory approvals.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of FinnCobalt to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Such risks and other factors include, among others, fluctuation in the price of base and precious metals; expropriation risks; currency fluctuations; requirements for additional capital; government regulation of mining operations; environmental, safety and regulatory risks; unanticipated reclamation expenses; title disputes or claims; limitations on insurance coverage; changes in project parameters as plans continue to be refined; failure of plant, equipment or processes to operate as anticipated; accidents, labour disputes and other risks of the mining industry; competition inherent in the mining exploration industry; delays in obtaining governmental approvals or financing or in the completion of exploration, development or construction activities. Although FinnCobalt and the author of this Report have attempted to identify important factors that could affect FinnCobalt and may cause actual actions, events or results to differ, perhaps materially, from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended.

There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. The forward-looking statements in this Report are based on beliefs, expectations and opinions as of the effective date of this Report. FinnCobalt and the author of this Report do not undertake any obligation to update any forward-looking information and statements included herein, except in accordance with applicable securities laws.

## 2 Introduction

AFRY Finland Oy (AFRY) has been commissioned by FinnCobalt Oy (FinnCobalt) to prepare an independent mineral resource estimate on the Hautalampi Ni, Cu, Co deposit in compliance with the recommendations of the 2012 Australasian Code for Reporting of Mineral Resources and Ore Reserves (JORC 2012).

This report has an effective date of June 21<sup>st</sup>, 2021. This report is based on the data collected and prepared for the Technical report for the Hautalampi Co-Ni-Cu deposit in 2009 (Finn Nickel Oy) and on the FinnCobalt drilling campaign from 2020.

The estimate was completed by Ville-Matti Seppä who is a Competent Person as defined by the Australasian Code for the Reporting of Mineral Resources and Ore Reserves (JORC Code) 2012 Edition.

Mr Seppä visited the site on March 10<sup>th</sup>, 2021. The inspection included:

- Visiting the historic Keretti mine area.
- Visiting the drill core storage.
- Overall view of the property.
- Inspection of the number of available drill holes.
- Discussions with Markus Ekberg, CEO of FinnCobalt Oy and geologists Kalle Penttilä and Matthias Mueller of FinnCobalt.

AFRY has relied on information provided by FinnCobalt to prepare this report. AFRY has no reason to believe that this information is materially misleading, incomplete, or contains material errors. The content of this report as expressed by AFRY is based on the assumption that all the data provided by FinnCobalt is complete and correct to the best of FinnCobalt's knowledge.

All measurement units used in this report are metric, and currency is expressed in the Euro (€) unless stated otherwise. The currency in Finland is the Euro.

### 3 Reliance on Other Experts

The Competent Person has relied on additional data from:

- The Exploration and Mining Registry (permitting), Finnish Safety and Chemicals Agency

The information, conclusions, and recommendations contained in this report are based on:

- The Competent Person field observations
- Data, reports, and other information supplied by FinnCobalt and other third parties.

To the report, Ville-Matti Seppä has relied on the ownership data provided by FinnCobalt and believes that such data and information is complete and correct. Mr Seppä has not completed an extensive property title and ownership search on Hautalampi and expresses no legal opinion on the ownership status of the property.

## 4 Property Description and Location

The Hautalampi property is located at Latitude 62.7151 °N, Longitude 28.9730 °E in the Outokumpu municipality, eastern Finland, about 2 km southwest of the town centre of Outokumpu, about 45 km WNW of the city of Joensuu, and about 350 km NE of Helsinki. (Figure 4-1).



Figure 4-1 Hautalampi project location.

The project is in the historic Keretti mine site, previously developed and operated by Outokumpu Oy. The mine site infra apart from the old hoisting tower has been removed. The Hautalampi property was previously known as the Keretti (or Outokumpu) property, which included the Keretti Cu Deposit, mined between 1913 and 1989.

## 4.1 Mineral rights

The property is covered by FinnCobalt mining concession 7802/1. The total area of the mining concession is 283.5 hectares (Figure 4-2). The mining concession comprises from 114.95 hectares size mining area and 168.55 hectares size auxiliary area.

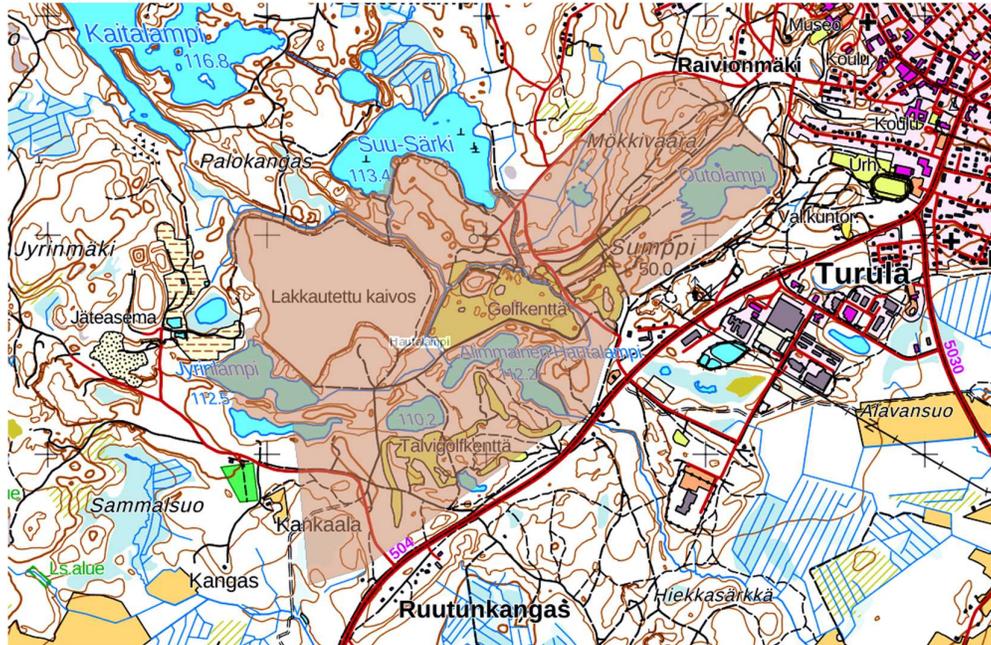


Figure 4-2 Location map of the mining concession relative to the local topography and town of Outokumpu.

## 5 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

### 5.1 Accessibility and physiography

The Hautalampi property can be accessed all year round by a tarred road, running through the centre of the claim. The nearest town is Outokumpu, about 2 km to the NE. The topography is of generally flat relief, with some low rolling hills, due to remnant outcrop or glacial features such as drumlins and moraines. Elevations range between 110 and 180 m above sea level. The area is a combination of disused mine site (Keretti mine), forestry, farming, and urban setting.

### 5.2 Climate

The climate in Finland is intermediate and both features of marine and continental climate are typical. The average temperatures at Outokumpu vary from +25 C in the summer to -20 C in the winter. Temperatures rarely go down to -45 C or up to +32 C (Finnish Meteorological Institute, 2012).

The annual precipitation is approximately 600-650 mm. The amount of precipitation increases towards summer, usually July and August are the rainiest months (Finnish Meteorological Institute, 2012).

Wintertime lasts approximately six to seven months in the Outokumpu region, and snow stays on the ground for 145 to 160 days of the year (Finnish Meteorological Institute, 2012).

### 5.3 Local Resources and Infrastructure

In terms of potential mining infrastructure, several high voltage power lines cross the property. Water is readily accessible from the river/stream and nearby lake. The area is a historic mining district with disused mine buildings and tailings areas to the north of the Hautalampi claim. It is envisaged that there would be no shortage of skilled personnel in the region. Vocational school in North Karelia's Outokumpu unit trains and educates mining professionals.

## 6 History

There has been no historical production from the Co-Ni-rich mineralised zone, which is the principal target on the Hautalampi property. However, mining was to start at Hautalampi and underground declines and some ore development are already in place (1200 m of decline and ca. 850 m of drifts). However, because of the rapid change of the Outokumpu Company's metal policy, the Co-production was sold and the mining of the Co-Ni ore in the Hautalampi zone was stopped in 1987. The deeper Cu-Zn ore that made up the Keretti mine was mined from 1913 until 1989 (Figure 6-1), over which time some 28.54 Mt of ore was mined, grading 3.8% Cu, 0.24% Co, 0.12% Ni, 1.1 % Zn, 8.9 ppm Ag, and 0.8 ppm Au.

The Hautalampi property was previously held by Outokumpu Mining Oy and was known variously as the Keretti Mine or Outokumpu Mine. Suomen Nikkeli Oy (Finn Nickel Oy) acquired a 100% interest in the property in 2007. Followed by a Finn Nickel bankruptcy in 2009 the mineral rights and the ground together with the Luikonlahti plant were purchased from the Finn Nickel bankruptcy estate by Vulcan Resources Pty Ltd. After Vulcan Resources withdrew from Finland the Hautalampi asset was sold to Vulcan Hautalampi Oy in September 2016. In May 2020 FinnCobalt Oy (formerly Vulcan Hautalampi Oy) agreed on the farm-in agreement with Eurobattery Minerals AB, where Eurobattery agrees to finance future development of the company and subsequently earns the right to purchase all FinnCobalt Oy shares.



Figure 6-1 Aerial photo from historical Keretti mining area.

## 6.1 Historical Reserves and Resources

The first resource estimations for Hautalampi were made by Jyrki Parkkinen in 1987 (Table 6-1) when the "nickel parallel" of Keretti co-deposit was estimated. The following estimate for Hautalampi ("nickel parallel W") was given:

Table 6-1 Hautalampi Resource estimate (Parkkinen 1987)

Tonnes (Mt)	Ni %	Cu %	Co %	Zn %	Fe %	S %
1	0.55	0.59	0.15	0.08	5.74	3.72

Later in 1997 (Table 6-2) Jyrki Parkkinen made the following estimate:

Table 6-2 Hautalampi Resource Estimate (Parkkinen 1997)

Tonnes (Mt)	Ni %	Cu %	Co %	Au (ppm)	Zn %	Fe %	S %
1	0.47	0.35	0.16	0.15	0.1	6.3	3.9

Parkkinen (1985) calculated mineral resources for the other "nickel parallels" of the Keretti copper deposit as well (Table 6-3). Sections 33-44 were called Raivionmäki formation and sections 44-57 Mökkivaara formation.

Table 6-3 Historical Mineral Resources of Keretti area (Parkkinen 1985)

Sections	Area	Tonnes	Ni %	Cu %	Co %	Zn %	Fe %	S %
33-44	Raivionmäki	1 000 000	0.3	0.11	0.05	0.07	4.1	2.2
44-57	Mökkivaara	556 750	0.34	0.04	0.02	0.06	4.4	3.4
33-57	Rai + Mök	1 556 750	0.31	0.08	0.04	0.07	4.2	2.6

In addition, Parkkinen (1985) calculated exploration potential for the "nickel parallel E" (Table 6-4), which was met at the 100 – 200 m level. It was estimated as more dispersed and of lower grade than the nickel parallel W. The calculation by Parkkinen (1985) gives the following resources for the nickel parallel E (sections 53-57 + 37-44):

Table 6-4 Mineral Resources for the "nickel parallel E" (Parkkinen 1985)

Tonnes Mt	Ni %	Cu %	Co %	Zn %	Fe %	S %
1.13	0.4	0.11	0.06	0.01	3.6	2.6

The mineral resources of the Hautalampi Deposit (profiles 89-103) are calculated in the Technical Report (Meriläinen et al. 2006) (Table 6-5), Property Portfolio of Suomen Nikkeli Oy (Finn Nickel Ltd.) in Southern Finland, prepared 1st October 2006 for Belvedere Resources Ltd.

Table 6-5 Hautalampi Mineral Resources as of 1st October 2006 @ NSR 30€/ ore tonne cut-off.

Resource class	Tonnes Mt	Cu %	Ni %	Co %
Indicated	1.18	0.49	0.48	0.12

Resource class	Tonnes	Cu %	Ni %	Co %
Inferred	50 000	0.24	0.38	0.08

In the Technical Report, NI 43-101 Technical Report for the Hautalampi Co-Ni-Cu Deposit at Outokumpu, Eastern Finland (Meriläinen et al. 2008) (Table 6-6) reported the following mineral resource for Hautalampi:

Table 6-6 Hautalampi Mineral Resources as of 1st October 2008 @ 0.30% Ni cut-off.

Resource class	Tonnes	Ni %	Cu %	Co %	Fe %	S %
Measured	837 544	0.483	0.489	0.12	4.281	2.411
Indicated	869 250	0.431	0.306	0.105	4.098	2.366
Total M+I	1.71 Mt	0.46	0.4	0.11	4.19	2.39

The most recent Mineral Resource estimate was prepared by Outotec Oyj (Finland) Oy by Markku Meriläinen with an effective date of March 15th, 2009 (Table 6-7). The resource estimate in compliance with the Canadian Securities National Instrument 43-101 Standards of Disclosure for Mineral Properties and Form 43-101F1.

Table 6-7 Hautalampi Mineral Resource as of 15<sup>th</sup> March 2009 @ 0.3% Ni cut-off

Resource class	Tonnes	Ni %	Cu %	Co %	Fe %	S %
Measured	1 030 000	0.47	0.47	0.13	4.71	2.65
Indicated	1 226 000	0.42	0.3	0.12	3.87	2.81
Total M+I	2 256 000	0.44	0.38	0.12	4.25	2.74
Inferred	895 000	0.4	0.3	0.1	3.6	2.9

Below (Table 6-8) is presented the Hautalampi Reserves estimated by Outotec Oyj in 2009. The ore reserves are not additional to the mineral resources in Table 6-7.

Table 6-8 Hautalampi Mineral Reserve as of 15<sup>th</sup> March 2009 @ NSR 30€/ ore tonne cut-off.

Reserve Class	Tonnes Mt	Ni %	Cu %	Co %	Fe %	S %
Proven	0.94	0.42	0.41	0.11	4.23	2.37
Probable	1.28	0.36	0.25	0.09	3.23	2.47
<b>Total</b>	<b>2.22</b>	<b>0.38</b>	<b>0.32</b>	<b>0.1</b>	<b>3.66</b>	<b>2.43</b>

The author has not done sufficient work to classify these historic estimates as current mineral resources and mineral reserves. The issuer is not treating the historic estimates as current mineral resources and mineral reserves.

## 7 Geological Setting and Mineralization

### 7.1 Regional Geology

The following is summarized from the Hautalampi feasibility study 2009.

The geological setting of the Hautalampi mineralisation is the same as that for the main Keretti Cu-rich ore, the main differences being in the localisation of the mineralised zone within the Outokumpu stratigraphy, and the nature of the mineralised body itself.

The Keretti deposit is located within the NE trending ca. 2 km wide horizon of black schists and serpentinite bodies that are defining the western margin of the Outokumpu structure (Figure 7-1 and Figure 7-2), and which is commonly called the "Outokumpu belt". The deposit is found in association with a long (>10 km), tubular (<1.2 x <1.5 km in cross-sections) body consisting of tightly folded serpentinite, located along its NW margin in a few metres to tens of metres layer of carbonate-skarn-quartz rocks that are enveloping and being folded with the serpentinite. Unfolded the serpentinite tube is found to consist of a ca. 150-200 m thick, possibly 5 km wide and >10 km long sheet, the thickness and width estimated for the thickest part of the tube. The carbonate-skarn-quartz enveloped, folded serpentinite tube is enclosed in the Upper Kaleva metagreywackes, with usually a few metres to a couple of tens of metres thick layer of black schist in between.



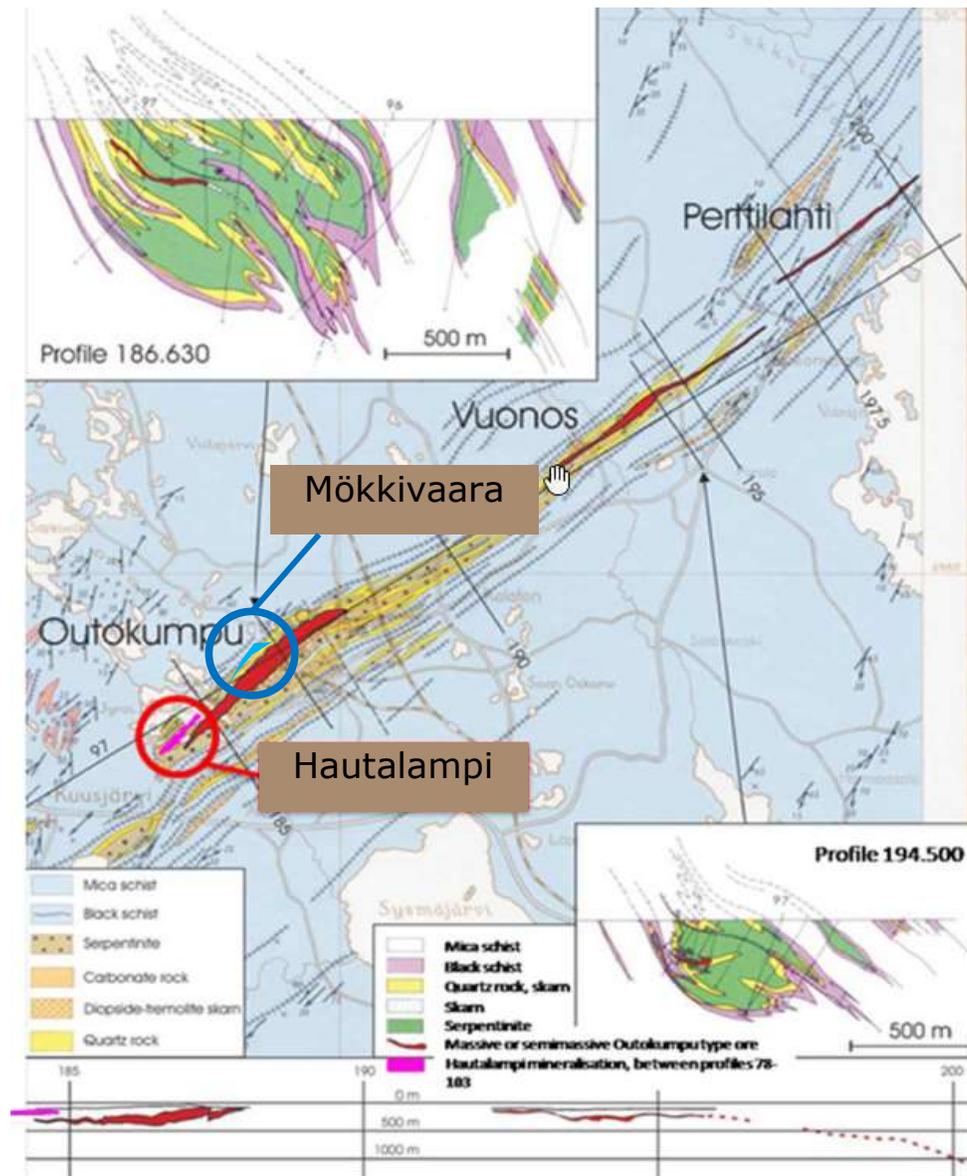


Figure 7-2 Geological map of the Outokumpu belt. Modified from GEOMEX report (2006) and Feasibility Study (2009)

The NW edge of the serpentinite tube shows several shallowly to SW plunging and 20-50° SE dipping isoclinal F1 folds. The Keretti ore plate is apparently enclosed for its entire length inside one of the F1 folds. In vertical cross-sections approximately perpendicular to the F1 axis, the ore plate is seen to broadly follow the upper limb of the host fold, defined by the contact between serpentinite and fringing carbonate-skarn-quartz rocks. In a detailed investigation of the cross-profiles it is seen that, in many of them, the ore sheet truncates the serpentinite carbonate-skarn-quartz sequence, implying that the final emplacement of the ore has to post-date the carbonate-silica alteration of the serpentinite body margins.

The Keretti and Vuonos ores are often said to be hosted by the quartz rocks or quartzites in the Outokumpu assemblage. However, this is an oversimplification. Although much of the footwall of the Keretti ore plate is generally against quartz rocks, some parts are found partly or completely enclosed in serpentinite. In addition, the hanging wall is mainly in direct contact with serpentinite and skarn-carbonate rock, and parts even in the mica and black schists. Also, the contacts of the ore with the quartz rocks, as well as the other wall rocks, are frequently very sharp and intrusive-like, suggesting an epigenetic relationship. This is further supported by the fact that ore material often brecciated the strongly shear-banded wall-rock.

## 7.2 Deposit Type

The Hautalampi mineralised zone is the south-westernmost part of the Co-Ni-Cu-mineralisation zone, which is situated within the hanging wall roughly parallel to the Outokumpu Keretti Cu-ore body. It belongs to the "Outokumpu-type" deposits within the rock associations of the Outokumpu Formation.

The Co-Ni-Cu zone has some aspects that are distinct to the main Cu ore environment. One is the frequent occurrence variably cummingtonite, anthophyllite, cordierite (usually extensively pinitised), staurolite, garnet, phlogopite, and spinel bearing chlorite-rich rocks/schists, hosted as thin layers (usually < 1m) or patches in skarn (diopside-tremolite)-quartz rocks forming the bulk of the Co-Ni-Cu zone. Another distinct feature is the abundance of often very coarse-grained, usually highly zirconian chromite in almost all the rock types in the zone. And a third one is the relative cobalt-nickel enrichment of the included sulphide mineralisation (modified from the GEOMEX Report and references therein).

It was earlier thought that the Hautalampi zone represents a feeder zone for the main Keretti Cu-ore. According to the now widely accepted Geomex model the silicate nickel was transformed to the sulphide fraction during the obduction and adjacent carbonate-quartz alteration of the seafloor around 1.9 Ga. After that during the areal deformation phases D1-2 the Ni bearing sulphides were remobilised and recrystallised. It is important to note that according to both models, the nickel-enriched zone was made before the folding. Consequently, understanding the fold structures at Hautalampi is important in trying to follow the mineralised zone.

## 7.3 Mineralization

The lower edge of the Co-Ni-Cu-mineralisation zone is typically some 150 to 200 m above and a bit to the NW of the upper edge of the main Keretti Cu-ore. Dimensions of the now modelled Hautalampi mineralised zone are approximately 1000 m in length, 100-150 m in width, and 1-30 m in thickness. Some drill holes indicate that in the NW parts the mineralisation is cut by the present erosion surface. Mineralisation has a 10 - 55° dip to the SE (on average about 25-30°). The main part of the mineralisation is 70-120 m below the

surface and the deepest parts of the known mineralisation are about 150 m below the surface.

Mökkivaara mineralisation is located approximately 650 meters north- east from the Hautalampi mineralisation and it has the same overall strike and dip as the Hautalampi mineralisation. More work is needed to gain confidence in the geological setting of Mökkivaara. Old interpretations suggest that the mineralisation is in synform but according to the latest drillings the data supports an antiform structure.

The Co-Ni-Cu mineralisation, (also referred to as the Hautalampi mineralisation), consists of tightly folded metamorphic rocks. Host rocks are mainly quartz rocks with anthophyllite-tremolite skarn bands and interlayers with variable amounts of chlorite. In some places, the mineralised zone is also hosted by skarniferous dolomitic rocks. Minor diopside can occur with other skarn minerals. In places, there is also nickel-bearing black schist or black schist bearing quartz rock in the footwall. Mineralisation mainly occurs as disseminations in bands due to metamorphism. The mineralised zone has in places a very sharp contact with the wall rocks. However, in many places, a transitional zone from one meter up to three meters occurs between the mineralised zone and wall rocks.

Chlorite schist is locally rich in garnet and also minor cordierite is present. Garnet and cordierite occur as porphyroblasts. Phlogopite occurs in quartz rocks and it seems to be an alteration product of amphiboles. Also, cummingtonite, staurolite, and spinel are mentioned in the GEOMEX report. Chromite and its alteration products, ferrian chromite and magnetite, are present in almost all the host and wall rocks, especially in rocks that are rich in quartz and dolomite. Serpentinites contain thin magnetite bands and magnetite grains are typical.

The hanging wall rock is mainly serpentinite and quite often also quartz rock and dolomite with or without diopside-tremolite skarn bands or interlayers. Footwall rocks are quite often the same due to folding. Rock types vary a lot through a drill hole, especially between skarn-, skarniferous quartz and quartz rocks. A simplified geological cross-section through profile 92 is presented in Figure 7-3.

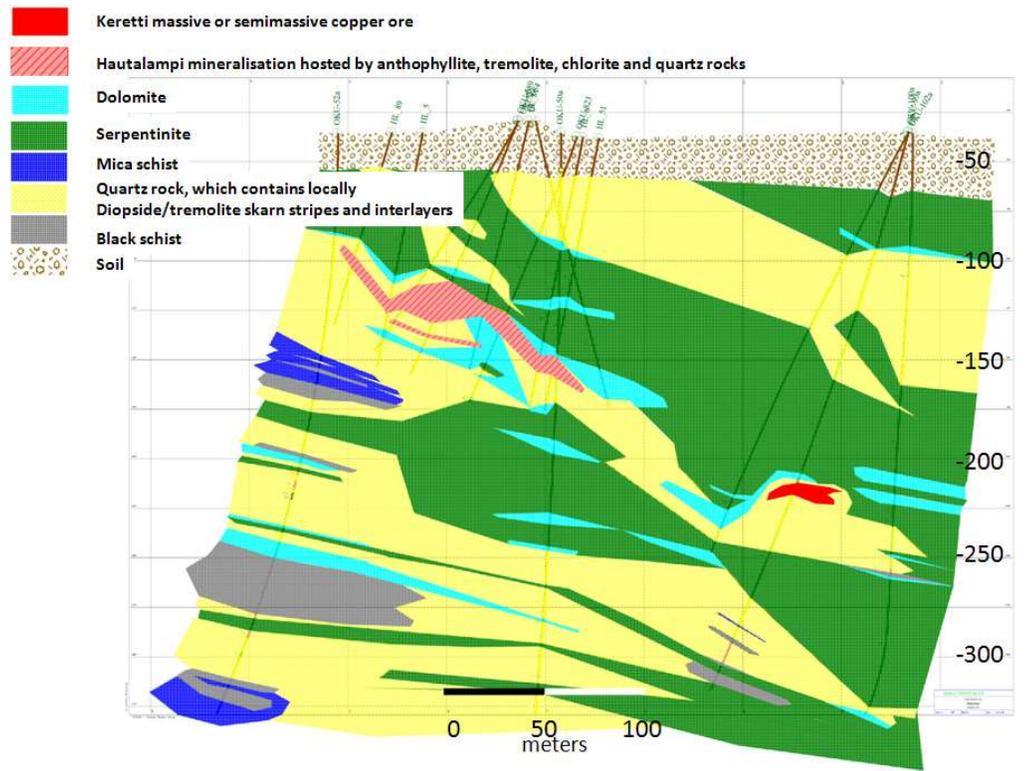


Figure 7-3 Cross-section through profile 92 of the Keretti copper (Outokumpu) and Hautalampi deposits.

## 8 Exploration and Drilling

### 8.1 Historical Drilling

The earliest drillings in the Co-Ni enriched zone nearby the Keretti Cu ore were made by Outokumpu Oy already in the 1930s connected with the drillings of the Cu ore. Later during the 1950s and 1960s drillings were focused on the Co-Ni enriched zone, including the Hautalampi area. In 1979 a drilling program for inventing the mineral resources in the Co-Ni enriched zone was commenced. Still, in 1984 a new drilling campaign was made. All together around 40 km was drilled (Figure 8-1). Some of the holes however include partly Keretti Cu-ore drilling.

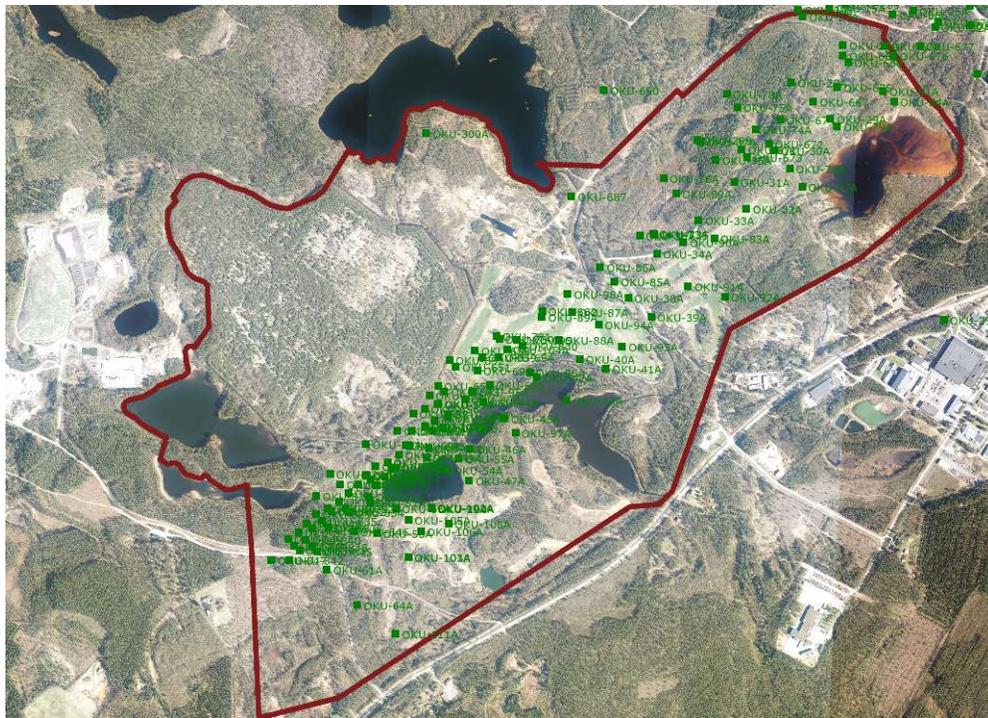


Figure 8-1 Overview map of the Outokumpu Oy drillings in relation to the mining concession.

### 8.2 Finn Nickel drilling 2007–2008

Between years Finn Nickel Oy drilled 92 drill holes (Figure 8-2) totalling 10 120.45 meters. The target of Finn Nickel's drilling program was to confirm the continuity of the mineralised zone. Diamond drilling and surveying (dip measuring) of the boreholes were contracted to Suomen Malmi Oy (SMOY). The collected drill core was 42 mm in diameter excluding three holes that were drilled for flotation tests using a 62 mm core diameter.



Figure 8-2 Overview map of the 2007-2008 Finn Nickel Oy drilling in relation to the mining concession.

### 8.3 FinnCobalt (Vulcan Hautalampi Oy) 2017-2018

A total of eight holes (Figure 8-3) with 993.7 meters of drill core were drilled for metallurgical testing. The collected sample diameter was 62 mm.

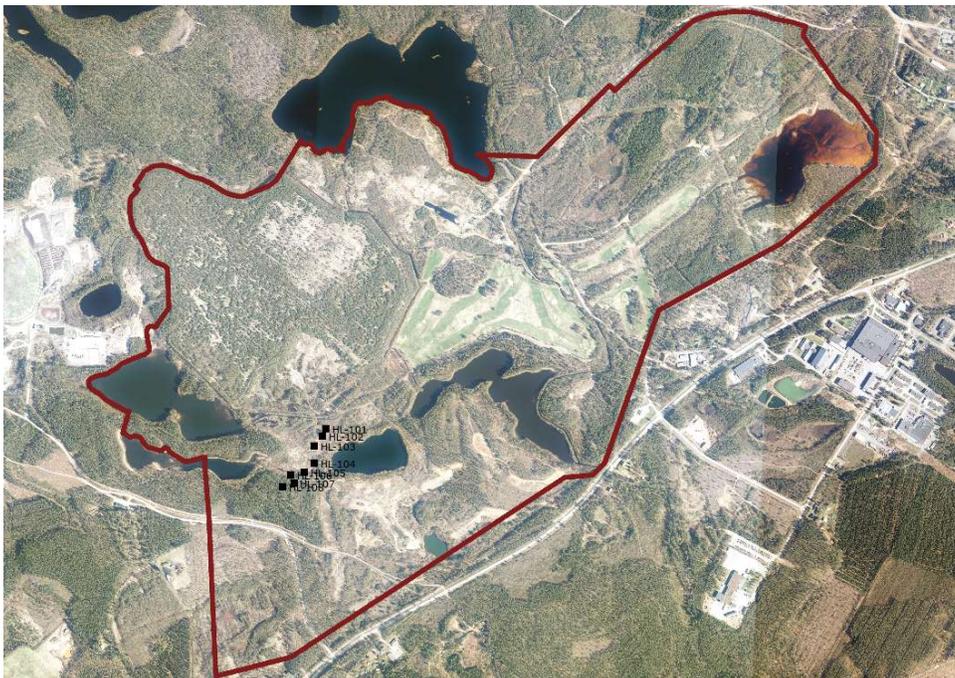


Figure 8-3 Overview map of the 2017-2018 FinnCobalt (Vulcan Resources) drilling in relation to the mining concession.

## 8.4 FinnCobalt Oy 2020

A total of 29 (Figure 8-4) drill holes were drilled between 13.07.2020 and 26.09.2020 comprising 3768.0m of drill holes. The diamond drilling was carried out by the Finnish contractor company Northdrill Oy using WL-76 equipment (57.5 mm sample diameter). The samples were oriented. Before drilling, all drill holes were marked in the field with a DGPS, supplied by Northdrill Oy, allowing a maximum collar accuracy. Once drilling was finished at a hole, the entire drill hole was surveyed for its azimuth and dip deviation, using a Devico DeviFlex instrument.

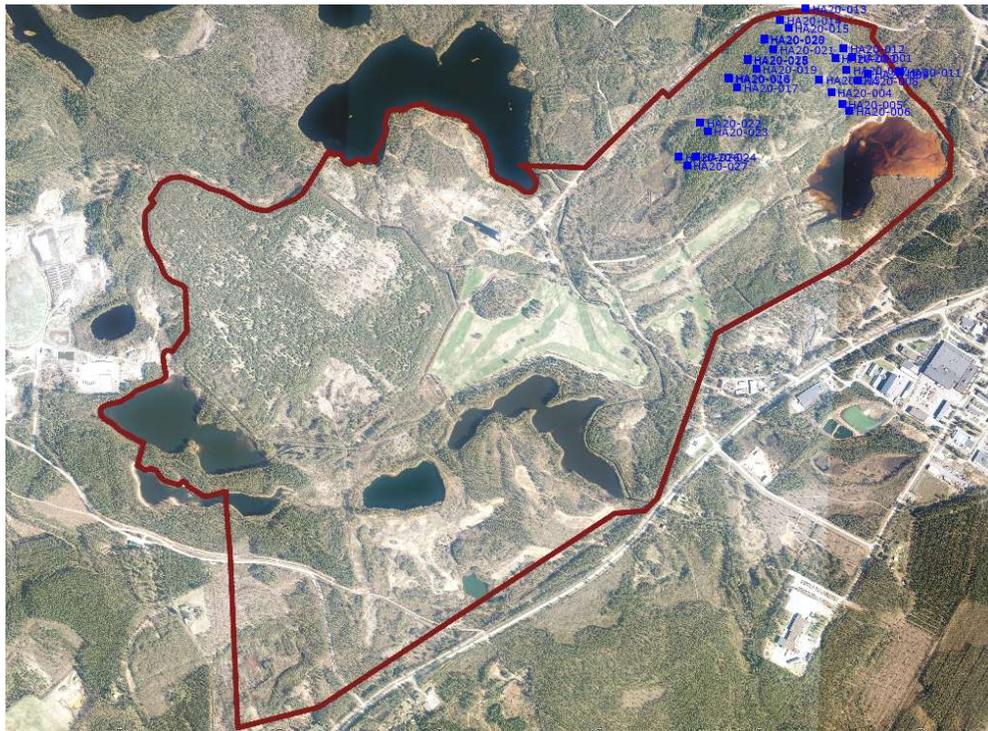


Figure 8-4 Overview map of the 2020 FinnCobalt drilling in relation to the mining concession.

## 9 Sample Preparation, Analyses and Security

### 9.1 Outokumpu Oy

Detailed information on the procedures from the Keretti Mine underground drilling, 1950 – 1986, and from Outokumpu Oy Exploration 1950–1987 program, are missing. Apart from assaying methodology the sample preparation and security measures are unknown. The detailed QA/QC procedures of the historical database (drilled 1961 – 1989) are not known in detail. However, this work was carried out by the large mining and exploration company Outokumpu, for their internal use, it is believed that the work was carried out to industry standards and Outokumpu exploration practices for that time and is believed to be reliable. A sampling of drill core would have been undertaken by company-authorized professional personnel. In accordance with good and established industry practice. The Competent Person has no reason to believe that the documentation provided is misleading in any way.

### 9.2 Finn Nickel drilling 2007–2008

Sample preparation was made in Outokumpu town by Okun Autolähetä Oy which is now owned by ALS Chemicals Ltd. Each core was halved with a diamond saw with one half prepared for analysis. The remaining half core was retained for verification and reference purposes. For assay samples, density measurements were done before sawing. Except for the first 25 drill holes, density was measured for all samples. The samples were dried and crushed in an Mn steel jaw crusher to a grain size of  $> 70\% < 6\text{ mm}$ . Instruments used in crushing were Retsch or Rocklabs. The sample was then pulverized to a grain size of  $> 85\% < 75\text{ }\mu\text{m}$  (Essa LM5). A 150 g sub-sample was taken for assays. Figure 9-1 illustrates the used sampling protocols and used QAQC methods.

Assaying was made in two different laboratories. The first 49 drill cores (holes HL-1 to HL-49) were analyzed in Kuopio by Labtium Oy. The Labtium laboratory has been accredited since 1994 according to the SFS-EN ISO/IEC 17025 standard to perform chemical analyses of geological samples. The quality system of the laboratory complies with the requirements of the Standards Council of Canada (CAN-P- 1579) "Guidelines for Accreditation of Mineral Analysis Testing Laboratories". The quality assurance- quality control (QAQC) program of Labtium Oy inserts into every batch of 50 samples, two standards, one blank, and three laboratory duplicates.

Base metal analyses were made using the following procedures (Labtium method code 510P): 0.15 g subsample is digested with 2.25 ml of aqua regia (3:1 mixture of concentrated hydrochloric acid and concentrated nitric acid) by heating at 90°C in an aluminium heating block for 1.5 hours and diluted to 15 ml with water. The solution is diluted with water before instrumental analysis. The following elements were analyzed in this method: Ag, As, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, Sb, Zn and S. Instrument used was "Inductively Coupled Plasma Optical Emission Spectrometer Thermo Electron iCAP 6600 Duo View with Cetac ASX-520HS Autosampler".

Gold was analyzed systematically from all samples in the first 49 drill holes. After that, samples for gold analysis were selected after the results of base metal assays from the Luikonlahti laboratory. Only samples above the cut-off value and one sample outside from both sides of the ore intersection was selected. The samples were analyzed at Labtium using their method 521U. This method includes the following procedures:

5.0 g subsample is leached with 15 ml of aqua regia at room temperature for 16 hours. After dilution, the analytes are separated and pre-concentrated from the matrix by using Hg-coprecipitation and stannous chloride as reductants. Analysis of Au is carried out by Graphite Furnace Atomic Absorption Spectrometry, Perkin Elmer Analyst 600 equipped with AS-600 Autosampler, or Perkin Elmer SIMAA 6000 instruments equipped with AS-72 Autosampler.

Platinum and palladium were also analyzed from six selected drill holes. Holes were selected to cover the whole research area and especially areas of high gold contents. Analyses were made in Labtium's Rovaniemi Laboratory using their high-precision classical Pb fire assay method 703P/704P. These methods include the following procedures:

12.5 g (703P) or 25 g (704P) subsample is weighted depending on nickel content. High nickel content in the sample needs a smaller subsample. After that, the sample is smelted with the help of some flux material (among other things borax, soda, and silica). When fusion is completed, the sample is leached at 70°C with aqua regia and analyzed using ICP-AAS as in method 510P, described above.

The rest of the drill core samples (holes HL-50 to HL-93) were analyzed in Finn Nickel Oy's laboratory at Luikonlahti. The following elements were analyzed: Cu, Co, Ni, Zn, and S. The following procedures were used:

0.5 g subsample is leached at 100°C with 20 ml of aqua regia (3:1 mixture of concentrated hydrochloric acid and concentrated nitric acid) for one hour. After leaching, 50 ml distilled water is added and then boiled following by cooling and dilution with water in a volume of 250 ml.

Analysis of Cu, Co, Ni, and Zn is carried out by Graphite Furnace Atomic Absorption Spectrometry, Perkin Elmer 1100B instrument. For quality control, samples analyzed both in Labtium and at Luikonlahti were used. Every thirteenth sample was a control sample.

Sulphur was analyzed by S-analyzer. This instrument was used also for samples, which had Sulphur content over 5 % in Labtium's 510P assay result (ICP assay is unreliable for Sulphur contents greater than 5 %).

Sulphur assaying procedures in Labtium:

Method codes are 510P, which is described above, and 810L, which is more accurate especially for higher Sulphur grades. Method 810L is used in check analysis for Luikonlahti assays. In method 810L the following procedure is used:

The sample is weighed in a combustion boat on an electronic balance which is interfaced to the PC. By pressing a key, the sample weight is transferred to the PC. If required, the sample weight can also be entered manually. Sub sample weight is usually 100-200 mg. The ceramic boat with the sample is placed on the furnace platform. The start key is pressed, and the analysis cycle begins. The sample is pushed into the furnace at 1400 °C temperature. Infrared detectors are used to analyze the amount of sulphur. At the end of the cycle, the assay results appear on the PC screen. Instrument is ELTRA CS-500.

Sulphur assays at Luikonlahti are made using the same procedures as at Labtium and with the instrument (ELTRA CS-530). Calibration samples used are BaSO<sub>4</sub> and NIST 1633b. For quality control, standard samples from Geostats Pty Ltd, Australia were used. At least every 10th sample was calibration or a control sample.

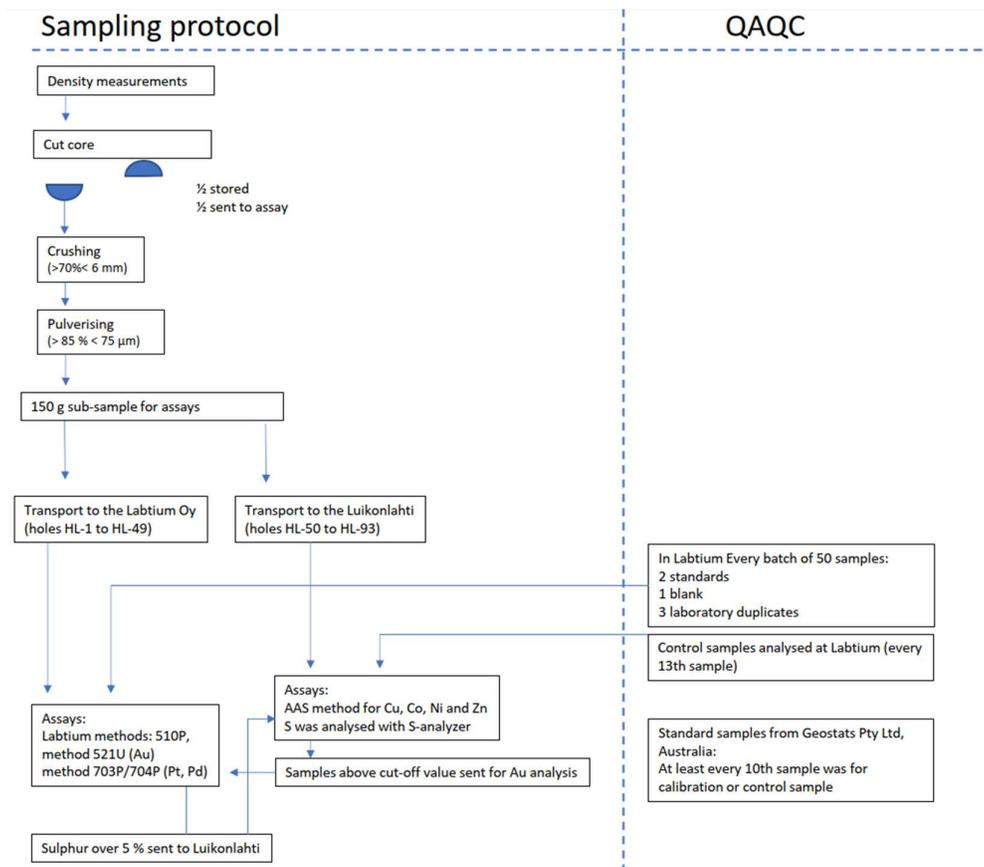


Figure 9-1 QAQC and Sampling protocol for Finn Nickel drill cores

### 9.3 FinnCobalt Oy 2020

Sampling protocols and QAQC measures are well documented from the year 2020 drilling campaign. The following chapters describe the logging, sampling, and QAQC protocols that were used. The protocol is illustrated below in Figure 9-2.

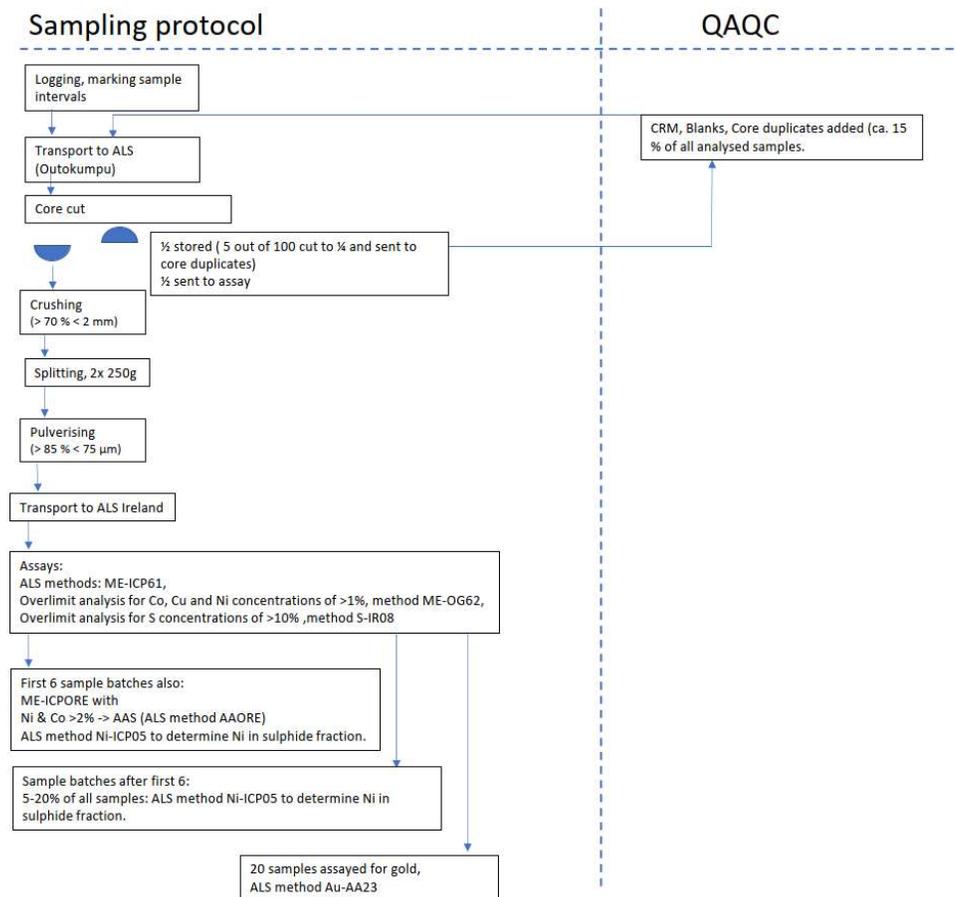


Figure 9-2 QAQC and Sampling protocol for FinnCobalt Oy's drill cores

#### 9.3.1 Logging and sampling protocol

##### Logging

- Before logging, the drill core pieces were organised, the core metered, and an orientation line was drawn where possible. The orientation line is facing downwards on the core. The orientation line is drawn in blue colour and is dashed if the orientation is uncertain.
- Logging was performed on a field laptop in Microsoft Excel templates. Logging information was subsequently imported to a Microsoft Access drill hole database. Logged information included lithological intervals (from and to), rock type, colour, foliation, grain size, texture, degree of weathering and fracturing, mineral constituents, alteration, and relative abundance and style of ore minerals.

- Logged lithologies including intervals and meter marks are marked on the core boxes.
- Magnetic Susceptibility readings (S.I.) were taken every 1m.
- Specific gravity measurements were taken before and after every lithological change and every ~3 metres in homogenous rock. The Archimedes method (submersion in water) was used.
- All logging was conducted by a trained geologist (Figure 9-3).



*Figure 9-3 Geologist Kalle Penttilä logging drill core at FinnCobalts logging facility and warehouse in Outokumpu.*

## **Sampling**

- Sample intervals are based on geological contacts and/or degree of mineralisation.
- The maximum sample interval is 2.0m, and the minimum sample interval is 0.2m.
- The "barren" rock enveloping mineralised intervals is sampled for at least 4m on each side (e.g., 2x2m intervals on each side).
- Sample intervals start and end at core loss.
- All sampling was conducted by a trained geologist.
- Sample intervals and sample numbers are noted on the core boxes.
- After marking of sample number and sample intervals on the core boxes the drill core within the core boxes is photographed, dry, and wet.
- The drill core boxes were subsequently submitted to ALS for sample preparation and analysis.
- For assaying the core is sawn and half of the core is analysed. The remaining ½ core remains for archive purposes, except for samples

where core duplicate QAQC is performed, here half of the ½ core is analysed and ¼ core remains for archiving.

- Control samples (CRM, blank, and core duplicates) were inserted and submitted together with normal samples and were analysed. Control samples represented ~15% of all for analysis submitted samples (5% CRM, 5% blanks, 5% core duplicates). One control sample follows five normal core samples -> 1 out of 6 samples is a control sample. The type of control sample rotates within the batch.

## QAQC

As part of the FinnCobalt QAQC protocol coarse blanks, standards, and core duplicates were inserted into the regular samples at a rate of 15:100 (1 out of 6 samples is QC sample). An overview of the QC samples is represented below (Figure 9-1).

*Table 9-1 Overview of the QC samples in FinnCobalts 2020 drilling campaign (total samples submitted = 1780)*

Type	Material	Number of insertions	Insertion frequency
Gade CRM	Oreas 13b	57	3.20 %
Grade CRM	Oreas 680	44	2.47 %
Coarse blank	ALS wash rock	105	5.90 %
Core duplicate	Quarter drill core	92	5.17 %

## Blanks

- All utilized blanks were coarse blanks.
- Each batch started with a coarse blank.
- 5 out of 100 (5%) of all samples submitted to ALS were coarse blanks.
- The blank material was put into a sturdy plastic bag together with a sample ID and was sealed. The sample ID was also written on the sample bag. The blanks were being submitted to the laboratory together with the drill core.

The coarse blank rock material was sourced from *Savon Kuljetus Oy* via *ALS Laboratories*. The blanks are produced in a quarry near Joensuu and are also used by *ALS* as a "wash rock" in-between runs. *ALS* is periodically analysing the rock material every month to ensure its homogeneity and barrenness. Based on *ALS's* analysis (Table 9-2) the rock is suitable to act as a blank for *FinnCobalt's* assay purposes.

Table 9-2 ALS analyses of the blanks. Gold is analysed with ALS code Au-ICP21 (Au 30g FA ICP-AES Finish) and all other elements with code ME-MS61 (48 element four-acid ICP-MS)

Analysis	Au ppb	Ag ppm	As ppm	Co ppm	Cr ppm	Cu ppm	Fe %	Mg %	Ni ppm	Pb ppm	S %	Zn ppm
Apr 20	<1	0.03	0.5	3.8	7	12.8	1.47	0.4	3.6	14.7	0.03	42
May 20	1	0.02	0.3	3.5	7	12.6	1.43	0.37	3.7	13.3	0.03	37
Jun 20	<1	0.03	0.6	3.4	7	14.2	1.55	0.4	3.3	12.9	0.02	41

The regular submission of blank material was used to assess potential contamination during sample preparation and to identify possible drifts in assay results over time. Figure 9-4 shows the FinnCobalt assay results of the utilized blanks throughout the 2020 drilling campaign. The results indicate that a good precision was present and no inherent drift in assay results can be observed. Only in one sample, for Ni, contamination can be interpreted (in VHO009). However, since the utilized coarse blanks are not certified, the Ni spike might also represent a higher Ni content in the source rock. Furthermore, the Ni spike only comprises an additional ~30ppm Ni, which is well within the acceptable range.

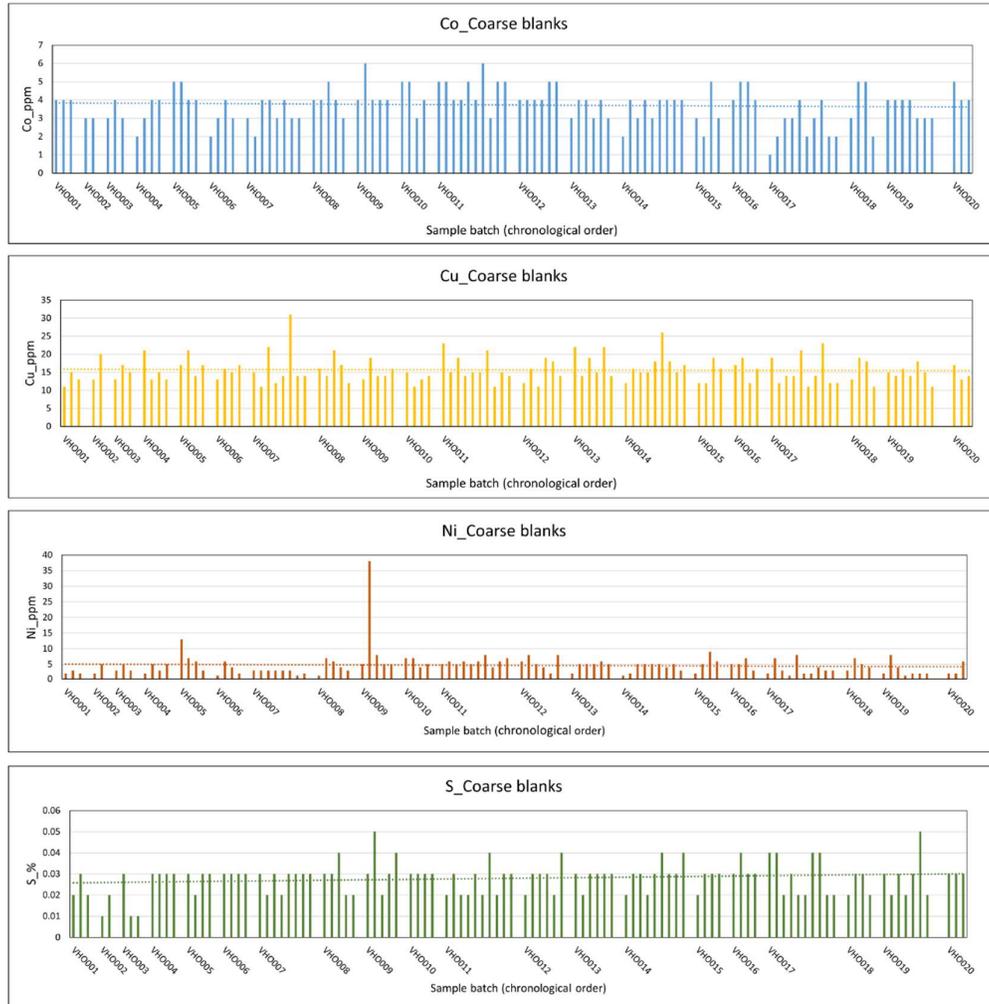


Figure 9-4 Coarse blank analysis results of the 2020 FinnCobalt drilling campaign, sorted by submitted sample batch in chronological order.

### Certified Reference Material (CRM)

- 5 out of 100 samples (5%) of all samples submitted to ALS were standards (CRMs).
- The CRMs were sourced from OREAS, Australia.
- Two different CRMs were utilized – one for high-grade mineralized zones (OREAS 680) and one for low-grade mineralized zones (OREAS 13b) to match the tenor of the mineralisation.

- The standards were delivered to the laboratory in their original 10g sachet packages. Before sample submittal, the OREAS CRM codes were erased from their packaging and were replaced by FinnCobalts sample number.

CRM Code	Cu	Ni	Co	State	Matrix	Mineralization
OREAS 13b	2327ppm	2247ppm	75ppm	primary	gabbronorite	disseminated magmatic
OREAS 680	0.904%	2.15%	334ppm	primary	gabbronorite	magmatic Ni-Cu- PGE

Two different standards were utilized to check the accuracy of the laboratory. Specific pass/fail criteria were determined from the standard deviation provided for the CRMs. The conventional approach to setting acceptance limits is to use the mean assay  $\pm 2$  standard deviations as a warning limit and  $\pm 3$  standard deviations as a failure limit, which are provided by the CRM manufacturer (Oreas). The results for Co, Cu, Ni, and S analysis of the CRMs Oreas 13b and Oreas 680 are given, respectively, (Figure 9-5 and Figure 9-6). The results show that failures only occurred in the low-grade Oreas 13b standard for Cu analysis. Here the highest Cu assay is 10.9% higher than the certified value. However, compared to the SDs of the other elements and the other standard, it appears that the Cu standard deviation for this standard is especially tight. Besides the multiple failures in the Cu assays of Oreas 13b, there are warnings in the S assays for the higher-grade standard Oreas 680. Furthermore, a positive drift is apparent in all presented elements for both standards. It is worth noting that FinnCobalts 2020 drilling campaign targeted low-grade areas at the beginning of the drilling and switched to higher-grade targets starting from batch VHO007. However, the last batch (VHO020) was from a low-grade Co and Cu area and still shows above-average assays for CRM Oreas 13b and Oreas 680, indicating that the observed drift cannot be solely attributed to generally higher ore grades in the regular drill core samples. Also, the coarse blank analyses do not show any indications for systematic contamination.

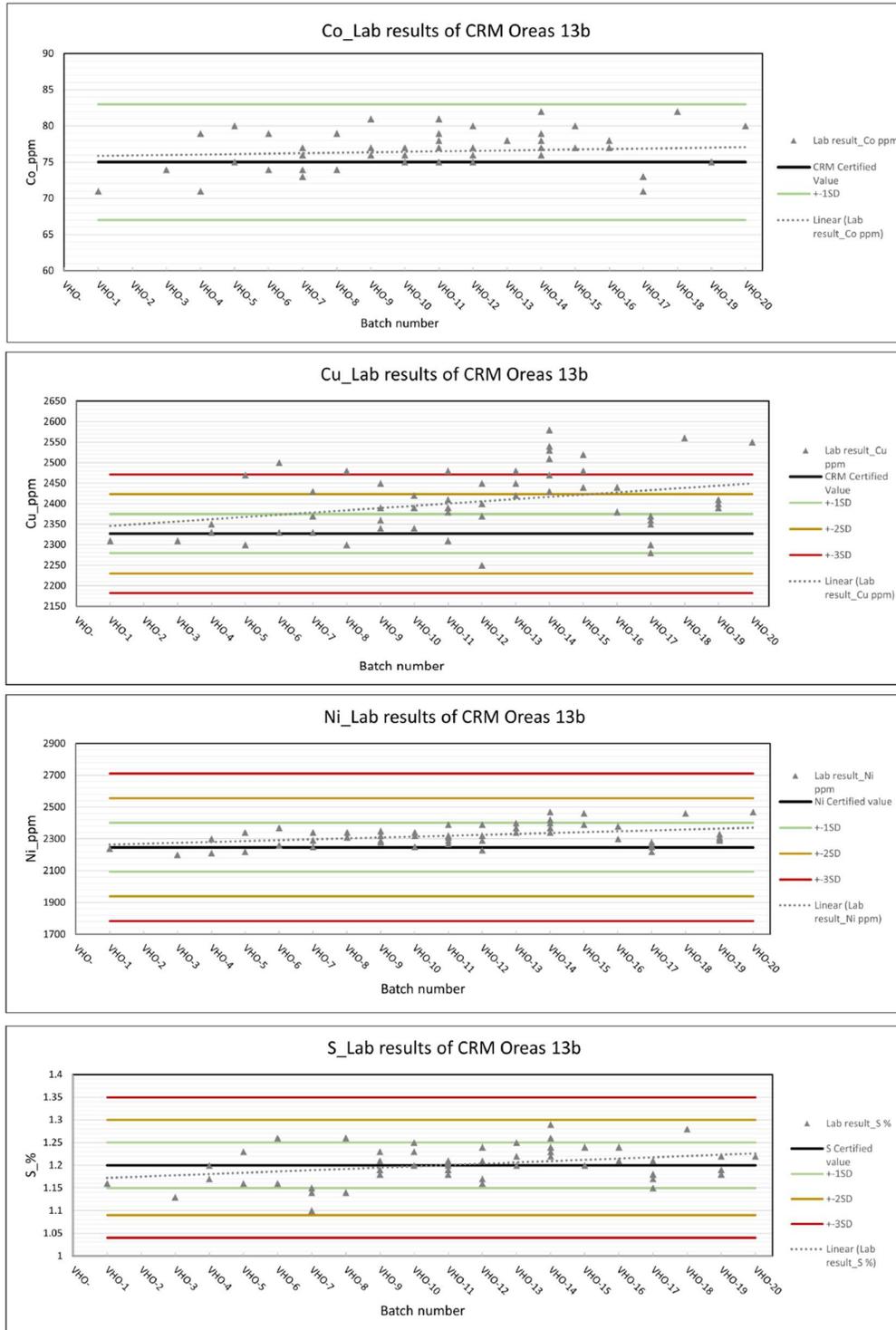


Figure 9-5 Assay results of standard Oreas 13b, in chronological order.

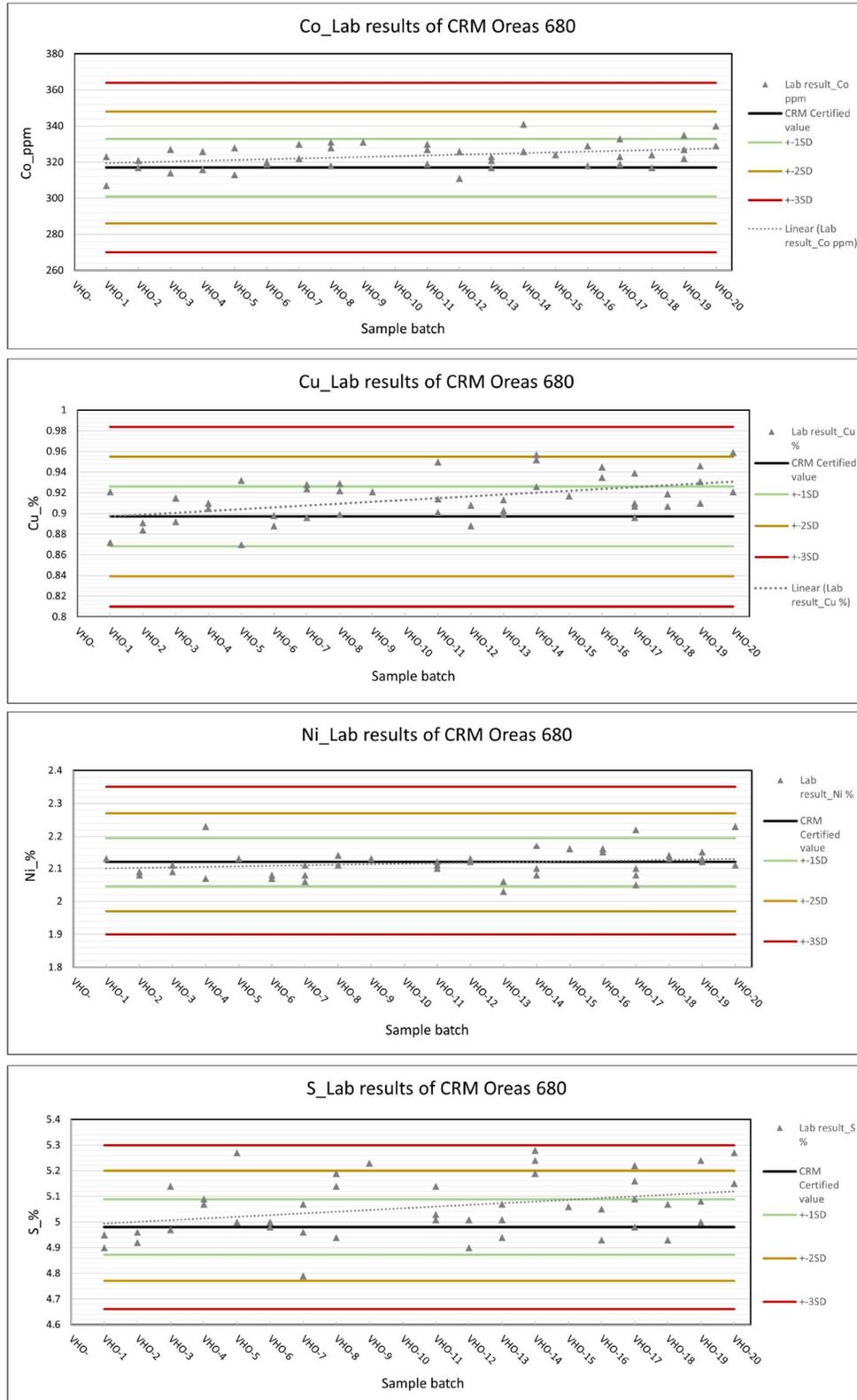


Figure 9-6 Assay results of standard Oreas 680, in chronological order.

## Duplicates

- 5 out of 100 samples (5%) of all samples submitted to ALS are core duplicates.
- For core duplicates, the ½ core remaining after normal sampling is quartered and one quarter is analysed (¼ core remains).
- The original sample and the duplicate sample have the same sample interval.
- The original sample and the duplicate sample have different sample numbers.

Duplicates were inserted to assess the precision of sample taking and to assess the representativity of sampled drill core. Figure 9-7 shows a comparison of the coarse duplicate assays with their original counterparts. Results suggest a good correlation between the original and duplicate core assays with R2 ranging between 0.958 and 0.972.

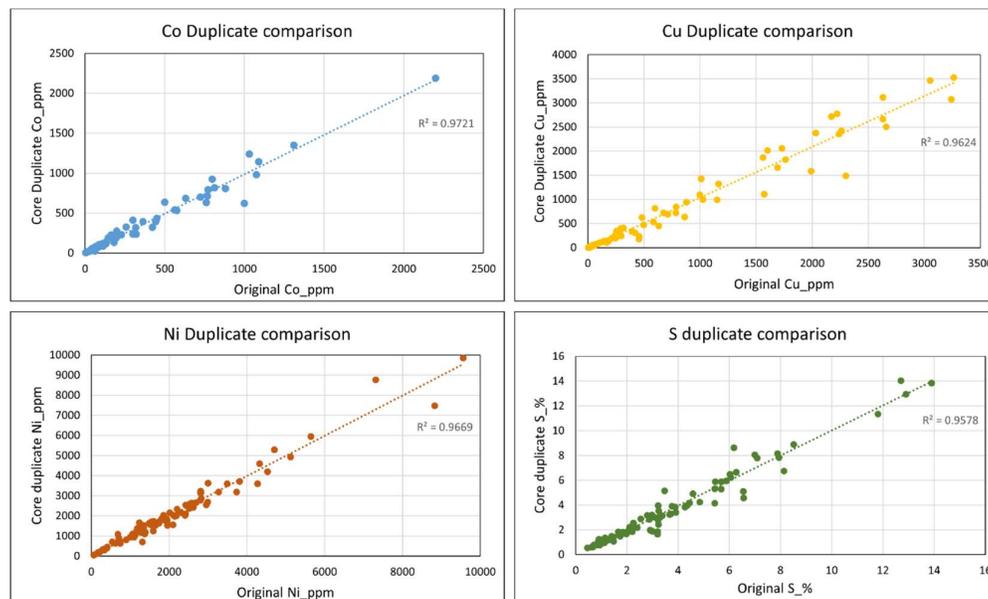


Figure 9-7 Assays of coarse duplicate samples plotted against their original counterparts.

### 9.3.2 Laboratory and assay methods

#### Sample transport

The drill core samples, still located in their core boxes, were picked up with a forklift by ALS from FinnCobalts warehouse and logging facility. At all times were the QAQC samples transported together with the drill core samples. The ALS laboratory site is only ~500m away from the FinnCobalt premises. Chain of custody certificates is collected for each batch sent to the lab (company batch number, lab work order form).

### **Laboratory and sample preparation**

FinnCobalt utilized ALS laboratories in Outokumpu where the drill core was sawn, crushed, split, and pulverized. ALS is an international, fully independent, and accredited analytical services firm whose Quality Management System framework follows the most appropriate ISO standard i.e. ISO 9001:2015 for survey/inspection activity and ISO/IEC 17025:2017 UKAS ref 4028 for laboratory analysis. At the ALS laboratory in Outokumpu, half-core samples were placed in an industry-standard sample preparation sequence (ALS code: PREP-31) comprising crushing to >70% passing 2mm, splitting, and pulverizing a 250g split portion to >85% passing 75µm. Subsequently, the pulps were shipped to Ireland to the ALS analysis facilities.

### **Assay methods**

The sample analysis was performed at the ALS laboratory in Ireland. An overview of which assay method was utilized in each hole, including sample amounts, is given in Table 9-3.

FinnCobalts main assay method consisted of 0.25g sample four acid digestion with ICP-AES (Inductively Coupled Plasma – Atomic Emission Spectroscopy) finish (ALS code: ME-ICP61), yielding assays for 33 elements. Overlimit analysis for Co, Cu, and Ni concentrations of >1% consisted of ALS code: ME-OG62. Overlimit analysis for S concentrations of >10% consisted of ALS code: S-IR08, which comprised Leco furnace and infrared spectroscopy. All FinnCobalts 1780 drill core samples were analysed with this method.

For the first 6 sample batches (325 samples) FinnCobalt also utilized strong oxidising digestion comprising HNO<sub>3</sub>, KClO<sub>3</sub>, and HBr with aqua regia, with an ICP-AES finish (ALS code: ME-ICP0RE) yielding assays for 19 elements. The over-limit assay method for Ni and Cu contents of >2% consisted of an analytical AAS (Atomic Absorption Spectroscopy) finish (ALS code: AAORE). The ME-ICP0RE assay method is applicable to base metal ores and is particularly suitable for massive sulphides. This additional assay method was chosen to compare the assay results to those of the ME-ICP61 method and to evaluate any grade differences. Since no grade differences were recognized, ME-ICP0RE was discontinued after batch VHO006.

Additionally, a partial digestion method (ALS code: Ni-ICP05) was utilized for 448 core samples to further determine the Ni content for exclusively the sulphide fraction. Ni-ICP05 analysis was conducted for every sample for the first 6 sample batches and ~5-20% of all samples for the remaining batches.

To get a better understanding of the Au concentration in the mineralised zones, a total of 20 Au assays were taken. For gold assays, the analysis method consisted of fire assay with AAS analysis using 30g sample sizes (ALS code: Au-AA23), yielding a 0.005 ppm Au detection limit.

Table 9-3 Drilling summary of the 2020 FinnCobalt drilling campaign.

SEQUENCE	HOLE_ID	DRILL TYPE	PROSPECT	AZIMUTH	DIP	STATUS	DRILL START	DRILL END	HOLE DEPTH	COMMENT	ASSAYS RECEIVED	SAMPLES (amount)	SAMPLE BATCH	Assay method (assay amount)	Sample N <sub>r</sub> -from	Sample N <sub>r</sub> -To
1	HA20-001	DD	BLUE SKY 2 & 3	315	-80	Extended	13/07/2020	14/07/2020	94.80		13/08/2020	50	VH0001	ME-ICP61 (50); ME-ICP61 (50); NI-ICP05 (50)	447001	447050
2	HA20-002	DD	BLUE SKY 2 & 3	315	-70	Target depth	15/07/2020	15/07/2020	62.60		21/08/2020	34	VH0002	ME-ICP61 (34); ME-ICP61 (34); NI-ICP05 (34)	447051	447084
3	HA20-003	DD	BLUE SKY 2 & 3	315	-70	Target depth	15/07/2020	16/07/2020	74.45		21/08/2020	50	VH0003	ME-ICP61 (50); ME-ICP61 (50); NI-ICP05 (50)	447085	447134
4	HA20-004	DD	BLUE SKY 2 & 3	315	-80	Target depth	16/07/2020	17/07/2020	125.75	Severe problems with this hole: several drill bits broken and water kept flowing out of the hole.	31/08/2020	67	VH0004	ME-ICP61 (67); ME-ICP61 (67); NI-ICP05 (67)	447135	447201
5	HA20-005	DD	BLUE SKY 2 & 3	315	-80	Terminated	17/07/2020	20/07/2020	204.40		31/08/2020	62	VH0005	ME-ICP61 (62); ME-ICP61 (62); NI-ICP05 (62)	447202	447263
6	HA20-006	DD	BLUE SKY 2 & 3	315	-80	Target depth	21/07/2020	22/07/2020	119.40		02/09/2020	34	VH0006	ME-ICP61 (34); ME-ICP61 (34); NI-ICP05 (34)	447264	447297
7	HA20-007	DD	BLUE SKY 2 & 3	315	-80	Extended	22/07/2020	23/07/2020	111.00	Hole was collapsing and had to be abandoned. Drillers did not want to drill any deeper. Old mining tunnels only 15m below end depth.	02/09/2020	28	VH0006	ME-ICP61 (28); ME-ICP61 (28); NI-ICP05 (28)	447298	447325
11	HA20-008	DD	BLUE SKY 2 & 3	315	-80	Terminated	27/07/2020	30/07/2020	230.90		18/09/2020	29	VH0007	ME-ICP61 (29); NI-ICP05 (2)	447326	447354
8	HA20-009	DD	BLUE SKY 2 & 3	315	-80	Target depth	23/07/2020	24/07/2020	80.80		29/09/2020	36	VH0010	ME-ICP61 (36); NI-ICP05 (2)	447622	447657
9	HA20-010	DD	BLUE SKY 2 & 3	315	-80	Terminated	25/07/2020	26/07/2020	176.50		06/10/2020	25	VH0011	ME-ICP61 (25)	447681	447705
10	HA20-011	DD	BLUE SKY 2 & 3	315	-80	Target depth	26/07/2020	27/07/2020	110.30		18/12/2020	54	VH0020	ME-ICP61 (54)	448727	448780
12	HA20-012	DD	BLUE SKY 2 & 3	315	-80	Extended	31/07/2020	31/07/2020	41.65		29/09/2020	23	VH0010	ME-ICP61 (23); NI-ICP05 (1)	447658	447680
13	HA20-013	DD	Blue Sky 1	315	-75	Target depth	31/07/2020	01/08/2020	86.50		05/10/2020	48	VH0011	ME-ICP61 (48)	447706	447725
14	HA20-014	DD	Blue Sky 1	315	-80	Extended	01/08/2020	02/08/2020	89.80		06/10/2020	79	VH0011	ME-ICP61 (79); NI-ICP05 (2)	447726	447832
15	HA20-015	DD	Blue Sky 1	315	-80	Extended	02/08/2020	04/08/2020	145.20		12/10/2020	100	VH0012	ME-ICP61 (100); NI-ICP05 (4)	447833	447932
16	HA20-016	DD	Blue Sky 1	315	-80	Extended	05/08/2020	07/08/2020	163.25		25/09/2020	83	VH0008	ME-ICP61 (83); NI-ICP05 (3)	447448	447530
17	HA20-017	DD	Blue Sky 1	315	-80	Extended	07/08/2020	09/08/2020	180.00		18/09/2020	93	VH0007	ME-ICP61 (93); NI-ICP05 (2)	447355	447447
18	HA20-018	DD	Blue Sky 1	315	-80	Extended	09/08/2020	10/08/2020	152.70		25/09/2020	91	VH0009	ME-ICP61 (91); NI-ICP05 (6); Au-AA23 (3)	447531	447621
21	HA20-019	DD	Blue Sky 1	315	-80	Terminated	14/09/2020	15/09/2020	155.50		29/10/2020	71	VH0014	ME-ICP61 (71); NI-ICP05 (3)	448031	448101
20	HA20-020	DD	Blue Sky 1	315	-80	Extended	12/09/2020	13/09/2020	149.15		29/10/2020	88	VH0014	ME-ICP61 (88); NI-ICP05 (1)	448102	448189
19	HA20-021	DD	Blue Sky 1	315	-80	Extended	09/09/2020	12/09/2020	290.60		20/10/2020	98	VH0013	ME-ICP61 (98); NI-ICP05 (16); Au-AA23 (7)	447933	448030
22	HA20-022	DD	Blue Sky 1	315	-80	Target depth	16/09/2020	17/09/2020	137.55		29/10/2020	70	VH0015	ME-ICP61 (70); NI-ICP05 (2)	448190	448259
26	HA20-023	DD	Blue Sky 1	315	-80	Target depth	22/09/2020	23/09/2020	130.85		23/11/2020	50	VH0017	ME-ICP61 (50); NI-ICP05 (9)	448329	448378
23	HA20-024	DD	Blue Sky 1	315	-80	Terminated	17/09/2020	18/09/2020	140.80		23/11/2020	111	VH0017	ME-ICP61 (111); NI-ICP05 (25)	448379	448489
27	HA20-025	DD	Blue Sky 1	315	-45	Target depth	23/09/2020	24/09/2020	91.50		26/11/2020	61	VH0018	ME-ICP61 (61); NI-ICP05 (2); Au-AA23 (5)	448490	448550
24	HA20-026	DD	Blue Sky 1	315	-80	Target depth	19/09/2020	20/09/2020	146.10		07/12/2020	89	VH0019	ME-ICP61 (89); NI-ICP05 (27)	448607	448695
25	HA20-027	DD	Blue Sky 1	315	-80	Terminated	20/09/2020	21/09/2020	91.10	Hole intersected serious cavings area and had to be abandoned. The last 2m before drilling stop were massive pyrrhotite mineralization	07/12/2020	31	VH0019	ME-ICP61 (31); NI-ICP05 (8)	448696	448726
28	HA20-028	DD	Blue Sky 1	315	-45	Target depth	24/09/2020	25/09/2020	87.50		26/11/2020	56	VH0018	ME-ICP61 (56); NI-ICP05 (1); Au-AA23 (5)	448551	448606
29	HA20-029	DD	Blue Sky 1	315	-45	Extended	25/09/2020	26/09/2020	97.35		29/10/2020	69	VH0016	ME-ICP61 (69); NI-ICP05 (7)	448260	448328
29								<b>3,768.00</b>				<b>1,780</b>				

#### 9.4 Assay comparison for the Hautalampi resource and Blue-Sky area

FinnCobalt Oy made two re-assay studies regarding the Hautalampi resource area and Blue-Sky area (Mökkivaara) in 2018 and in 2021. During 2018 a re-logging and re-assaying program was applied to 31 OKU drill holes, giving 416 new ICP assays. The old Outokumpu assay results were then compared against the re-assayed results. Although the sampled intercept can be the same the sampling method has varied. In some of the old cores during Outokumpu exploration, the core has not been split but pieces of the core have been sampled and average values calculated. The re-assay sampling was made by splitting the core when possible. In some cases, however, the old core left was so narrow that splitting was not made, and core pieces were taken instead. In summary, the data from the 2018 study shows that the re assay values for cobalt, copper, nickel and sulphur are 24 to 28 % lower than the old assay values.

It is CP's opinion that because of the varying sampling techniques used in the old Outokumpu sampling, the comparison to FinnCobalt samples can be biased. The re-assays made in 2021 can be considered more reliable.

The old Outokumpu Oy (OKU) drill core assays were compared to the re-assays made in 2021 by FinnCobalt in the Hautalampi resource area and Blue-Sky area (Mökkivaara). The assay method in the re-assaying was ALS/ME-ICP61. The old Outokumpu assays have been made mainly by FAAS. The total number of the samples was 131 from 20 holes and a total length of 467.54 m of drill core (Figure 9-8 and Table 9-4). Sampling for the re-assaying was made by Matthias Mueller and Kalle Penttilä in January 2021 at the GTK drill core storage in Loppi. The existing half core was halved, by the GTK staff with a diamond saw, so the re-assay sample was one-quarter of the core. Regarding QAQC measures, blanks, standards, and pulp duplicates were inserted in the sample batch. QAQC samples made up ~15% of the total submitted samples, with 1 out of 6 samples being a QAQC sample. The 15% QAQC samples were divided equally into 5% coarse blanks, 5% standards, and 5% pulp duplicates. All utilized blanks were coarse blanks, sourced from Savon Kuljetus Oy via ALS Laboratories, who use the rock as a "wash rock" in-between runs. ALS is periodically analysing this blank rock material every month to ensure its homogeneity and barrenness. The utilized standards were sources from OREAS, Australia. Two different standards were used – one for high-grade mineralized zones (OREAS 680) and one for low-grade mineralized zones (OREAS 13b) to match the tenor of the mineralisation. Both standards have certified values for the elements of interest (Co, Cu, Ni, and S).

The results of the comparison are shown in Figure 9-9 – Figure 9-14 and in Table 9-4 figures 2-7 and Table 1. As a summary the re-assays conform well with the OKU assays for the most important metals - nickel, cobalt, and copper:

- For nickel, the average difference is small – re-assay is on average 2.4 % lower, but for the ore grade samples (> 0.3 %), the re-assay is on average 7.4 % lower. This is well depicted in fig. 2.
- For cobalt, the re-assay gives in average slightly higher values – the average difference is 5.0 %.
- For copper, the difference is small – re-assay is on average 1.4 % higher.

For zinc, there is no correlation at all (Figure 9-12). This may be reflected by the tendency of zinc to occur very unevenly in the rock, so the core halves are always unequal. The same applies partly also to copper. The basic reason for this is that zinc and copper are much more mobile during all the ore-forming processes than nickel and cobalt.

OKU assay data for iron and sulphur was available only for 16 samples, so the comparison is not very reliable. In sulphur assay comparison the OKU assays are systematically higher (Fig. 6). In iron assay comparison the correlation is poor (Fig. 7).

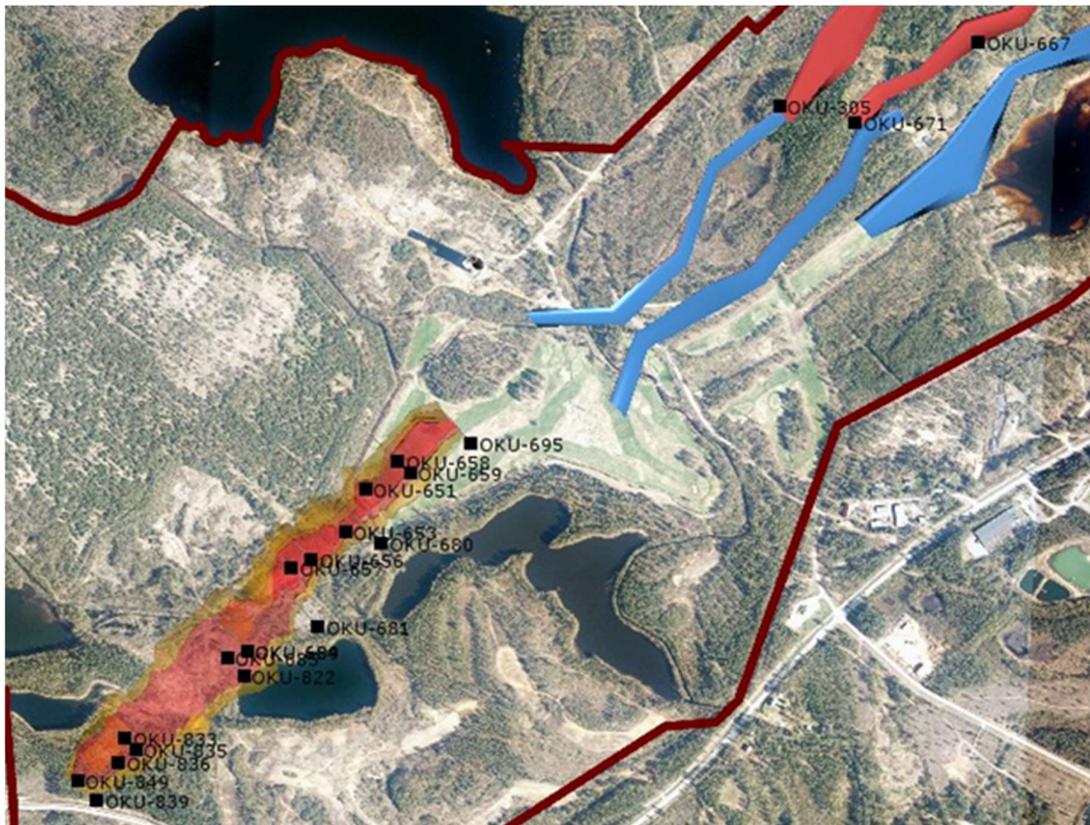


Figure 9-8 Location of the drill holes for the re-assays. Hautalampi resource area (red+yellow) and Blue-Sky areas / Mökkivaara (blue and red) are shown.



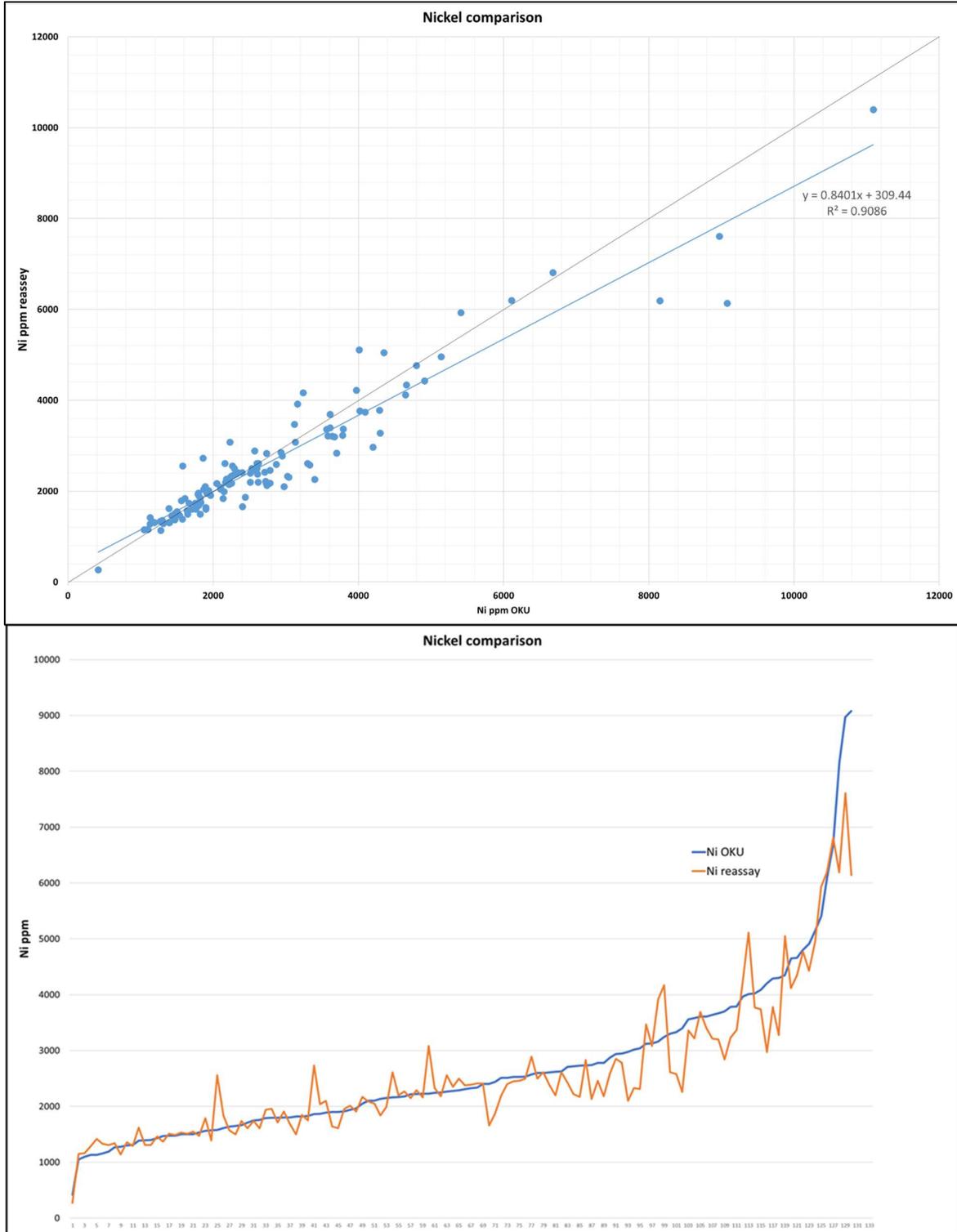


Figure 9-9 Nickel comparison.

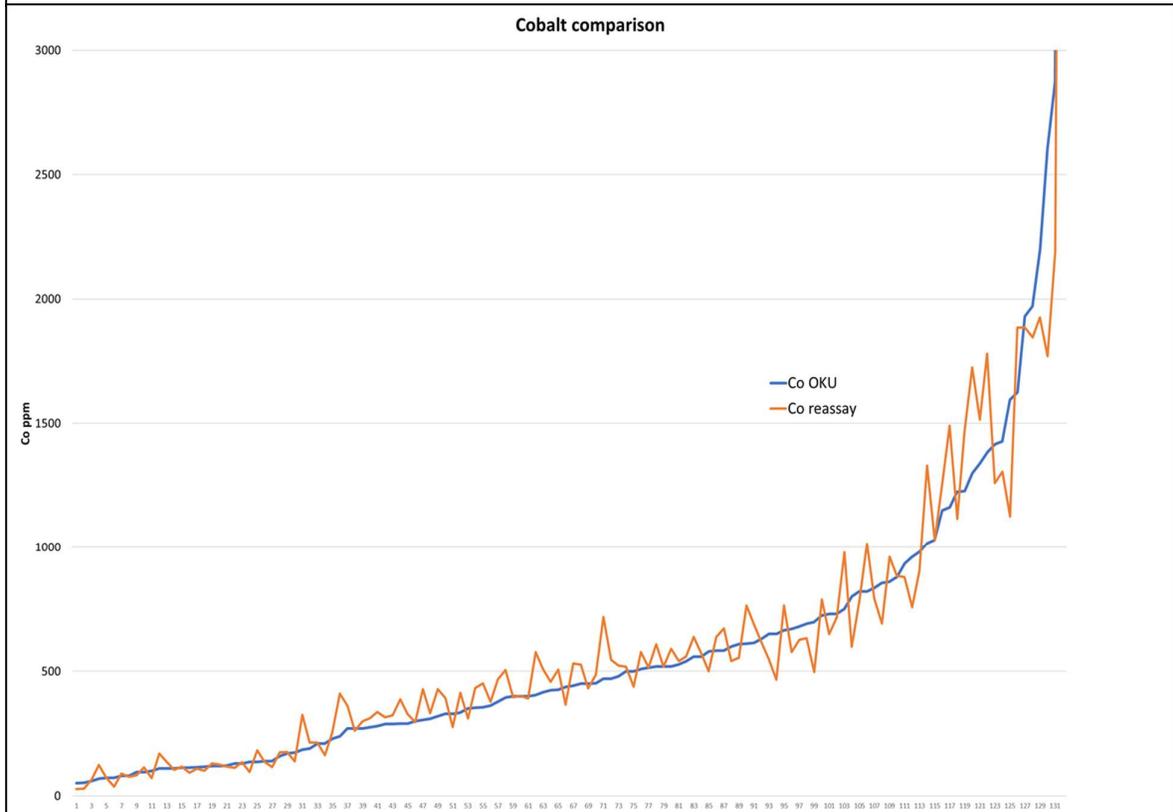
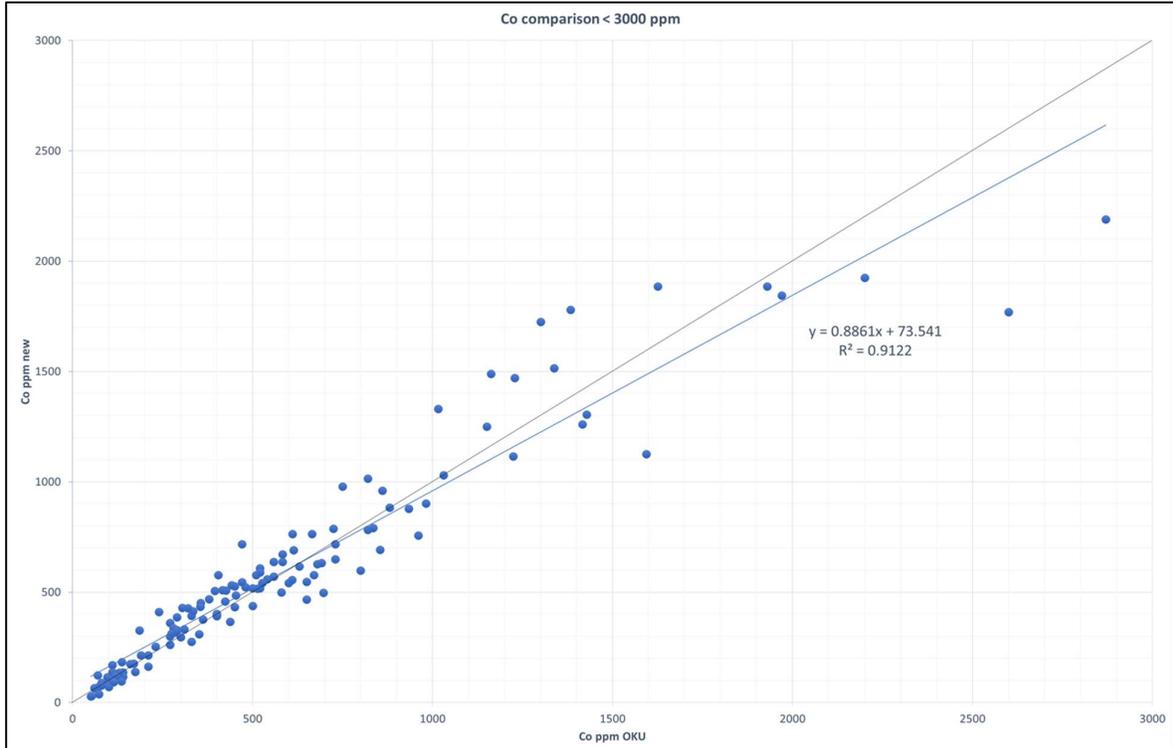


Figure 9-10 Cobalt comparison.

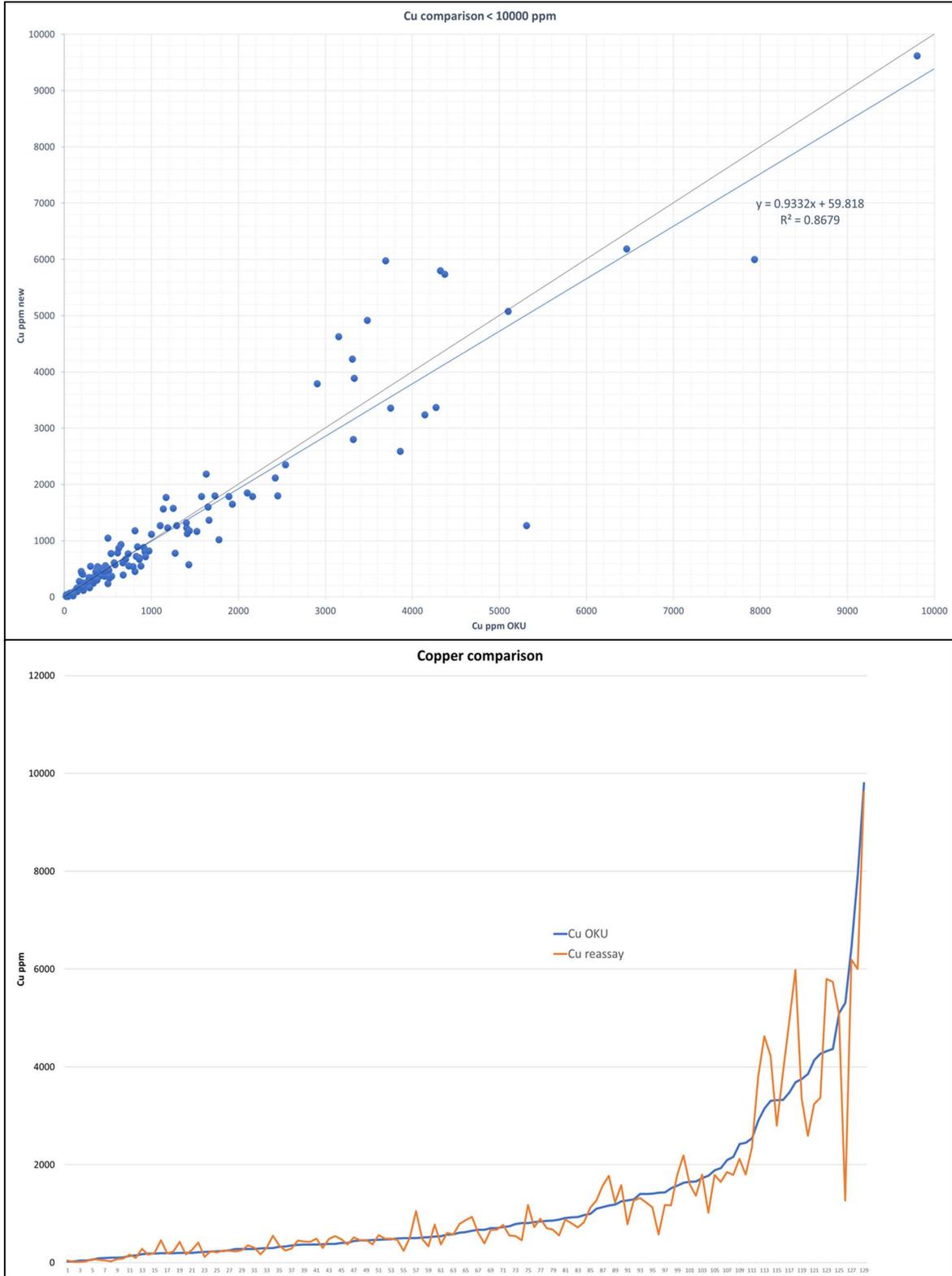


Figure 9-11 Copper comparison.

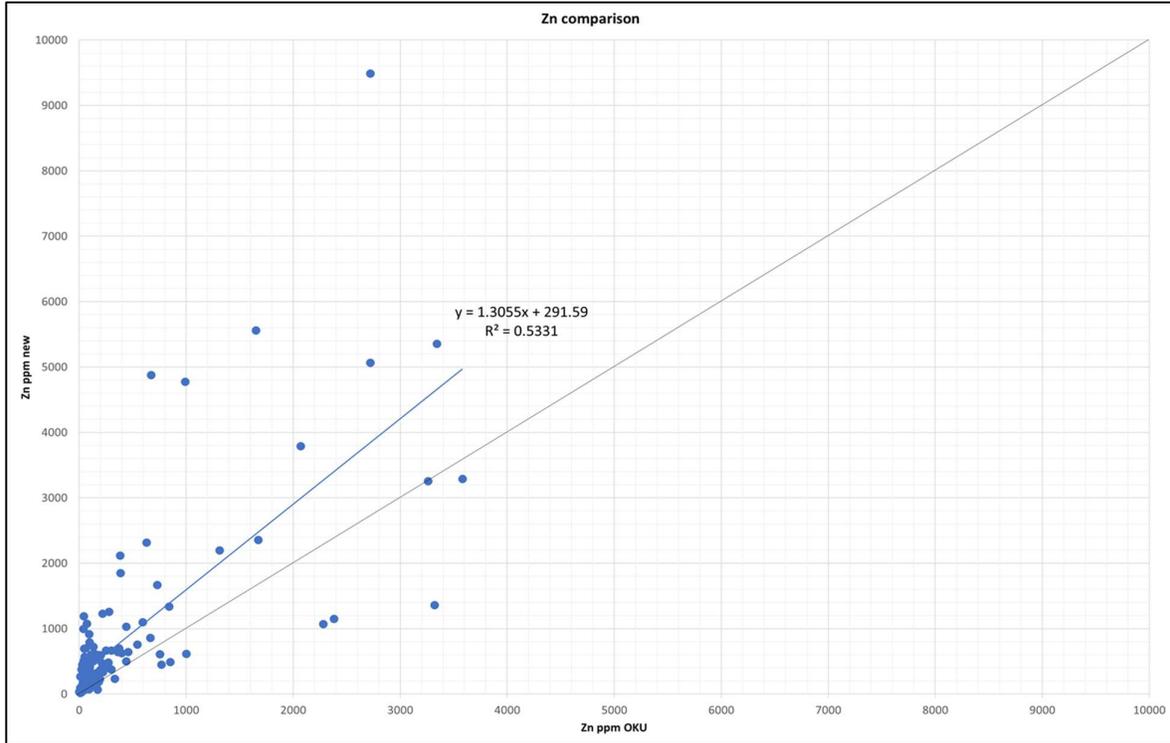


Figure 9-12 Zinc comparison.

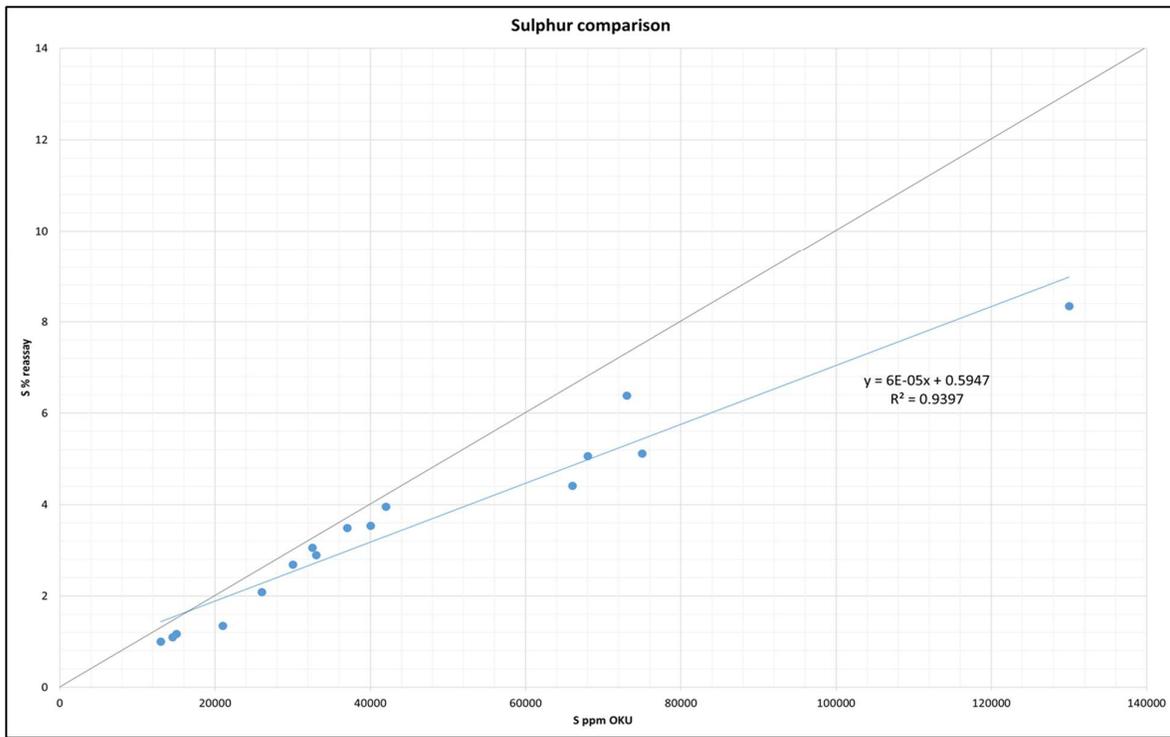


Figure 9-13 Sulphur comparison.

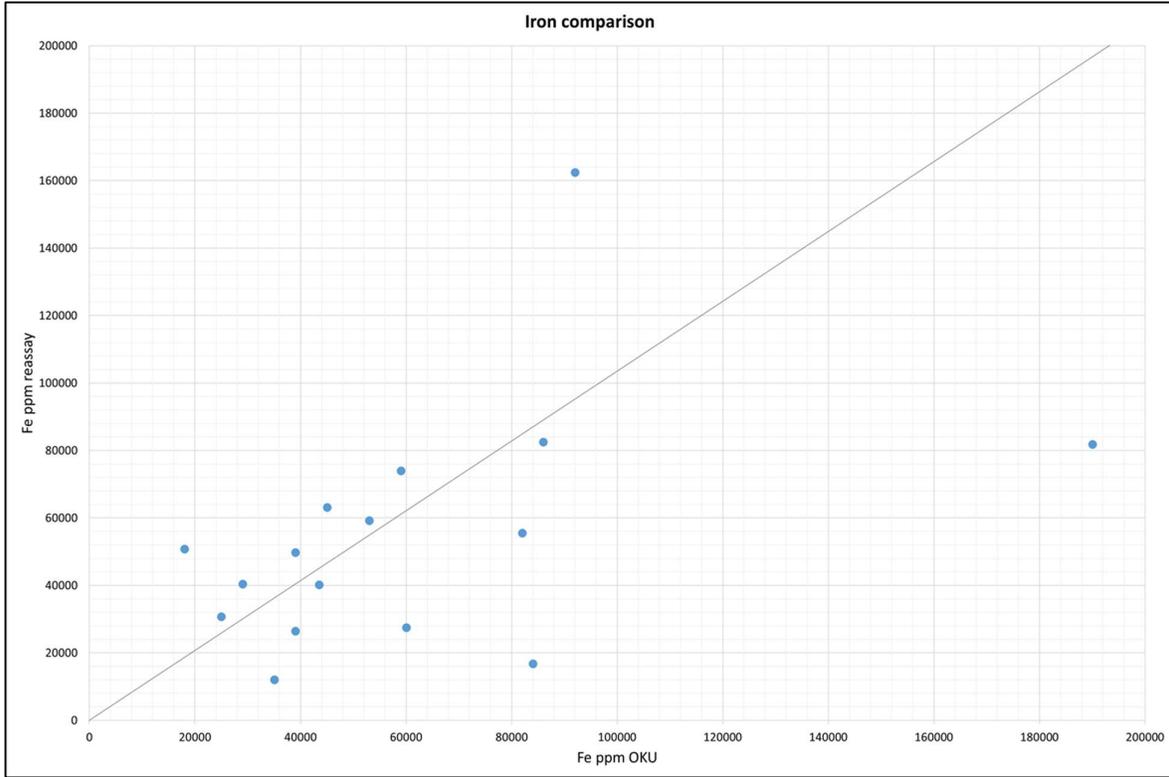


Figure 9-14 Iron comparison.

Table 9-4 Reassays and old Outokumpu Company assays (OKU) for Co, Cu and Ni.

				467.54	OKU	Reassay	Co Difference	OKU	Reassay	Cu Difference	OKU	Reassay	Ni Difference
Average of all							-5.0			-1.4			2.4
Sample ID	Hole ID	From m	To m	Length m	Co ppm	Co ppm	%	Cu ppm	Cu ppm	%	Ni ppm	Ni ppm	%
039	OKU-305	12	17	5	120	126	-5.0	100	71	29.0	1800	1910	-6.1
040	OKU-305	17	23	6	300	296	1.3	200	258	-29.0	1500	1530	-2.0
041	OKU-305	23	29	6	650	547	15.8	2100	1850	11.9	1800	1690	6.1
042	OKU-305	29	34	5	600	542	9.7	1100	1270	-15.5	2100	2050	2.4
044	OKU-305	34	39	5	580	500	13.8	1400	1320	5.7	2600	2500	3.8
045	OKU-305	39	42.2	3.2	500	518	-3.6	700	669	4.4	2600	2610	-0.4
046	OKU-305	42.2	47.5	5.3	270	262	3.0	500	508	-1.6	2400	2410	-0.4
047	OKU-305	47.5	53	5.5	100	71	29.0	100	27	73.0	1400	1310	6.4
048	OKU-305	53	59.35	6.35	130	113	13.1	300	309	-3.0	1500	1510	-0.7
002	OKU-651	19.5	24.4	4.9	450	527	-17.1	230	211	8.3	1820	1500	17.6
003	OKU-651	24.4	29.7	5.3	520	518	0.4	190	456	-140.0	2050	2170	-5.9
004	OKU-651	37.8	43.45	5.65	270	361	-33.7	470	560	-19.1	1270	1340	-5.5
005	OKU-651	43.45	47.15	3.7	190	214	-12.6	370	431	-16.5	1430	1460	-2.1
006	OKU-651	47.15	49.8	2.65	500	438	12.4	970	824	15.1	2780	2460	11.5
008	OKU-651	49.8	56	6.2	270	300	-11.1	380	486	-27.9	2510	2200	12.4
009	OKU-651	56	61.1	5.1	140	116	17.1	170	280	-64.7	2440	1870	23.4
010	OKU-651	61.1	66	4.9	110	138	-25.5	810	456	43.7	1610	1840	-14.3
011	OKU-651	83.2	87.3	4.1	130	135	-3.8	60	69	-15.0	2710	2420	10.7
026	OKU-653	58.45	62.6	4.15	70	124	-77.1	20	44	-120.0	1160	1330	-14.7
027	OKU-653	62.6	66.2	3.6	670	578	13.7	740	554	25.1	2780	2180	21.6
028	OKU-653	66.2	70.8	4.6	510	578	-13.3	300	548	-82.7	1820	1850	-1.6
029	OKU-653	70.8	72.2	1.4	540	559	-3.5	810	1180	-45.7	1760	1610	8.5
030	OKU-653	72.2	75	2.8	400	395	1.3	490	462	5.7	1790	1940	-8.4
032	OKU-653	75	79.5	4.5	400	391	2.3	1930	1650	14.5	1900	1610	15.3
033	OKU-653	79.5	83.7	4.2	290	387	-33.4	500	1050	-110.0	1500	1550	-3.3
034	OKU-653	83.7	88.3	4.6	170	177	-4.1	330	245	25.8	1050	1150	-9.5
035	OKU-653	88.3	92.9	4.6	650	466	28.3	840	896	-6.7	2740	2130	22.3
036	OKU-653	92.9	95.6	2.7	80	89	-11.3	40	15	62.5	1640	1570	4.3
038	OKU-653	95.6	100.35	4.75	60	66	-10.0	350	284	18.9	1100	1160	-5.5
513	OKU-656	60.4	65.5	5.1	520	590	-13.5	280	308	-10.0	2170	2200	-1.4
514	OKU-656	65.5	68.6	3.1	750	979	-30.5	1630	2190	-34.4	3160	3920	-24.1
515	OKU-656	68.6	72.6	4	280	337	-20.4	400	480	-20.0	1910	1960	-2.6
516	OKU-656	79.15	83.2	4.05	450	432	4.0	790	543	31.3	1830	1750	4.4
517	OKU-656	83.2	87.9	4.7	110	105	4.5	90	61	32.2	1650	1500	9.1
050	OKU-657	45.3	49.2	3.9	470	546	-16.2	140	160	-14.3	2870	2590	9.8
051	OKU-657	56.8	60.5	3.7	330	393	-19.1	380	543	-42.9	1750	1740	0.6
052	OKU-657	60.5	65.5	5	240	410	-70.8	440	516	-17.3	1860	2730	-46.8
053	OKU-657	65.5	69.1	3.6	610	555	9.0	1430	577	59.7	3040	2310	24.0
054	OKU-657	69.1	72.5	3.4	480	523	-9.0	360	449	-24.7	2510	2400	4.4
056	OKU-658	19	22.9	3.9	527	542	-2.8	703	674	4.1	3021	2330	22.9
057	OKU-658	25.8	29.5	3.7	400	402	-0.5	2422	2120	12.5	1898	1640	13.6
058	OKU-658	29.5	33.7	4.2	697	498	28.6	1777	1020	42.6	2403	1660	30.9
059	OKU-658	33.7	38	4.3	351	310	11.7	476	490	-2.9	1575	1390	11.7
060	OKU-658	38	42	4	96	115	-19.8	185	161	13.0	1193	1310	-9.8
040	OKU-658	42	46.05	4.05	334	414	-24.0	451	460	-2.0	2150	1990	7.4
041	OKU-658	46.05	50.3	4.25	583	672	-15.3	535	777	-45.2	3120	3470	-11.2
042	OKU-659	42.3	45.6	3.3	289	324	-12.1	1134	1570	-38.4	2572	2890	-12.4
044	OKU-659	45.6	52	6.4	115	110	4.3	198	424	-114.1	1476	1490	-0.9
045	OKU-659	52	57.4	5.4	73	72	1.4	20	13	35.0	1132	1420	-25.4
046	OKU-659	57.4	62.8	5.4	185	326	-76.2	239	250	-4.6	1388	1620	-16.7
047	OKU-659	62.8	68.5	5.7	611	764	-25.0	1402	1230	12.3	2327	2390	-2.7
048	OKU-659	73.7	78.15	4.45	426	507	-19.0	372	488	-31.2	1936	2010	-3.8
002	OKU-659	78.15	82	3.85	137	183	-33.6	192	229	-19.3	1561	1790	-14.7
003	OKU-659	82	86.15	4.15	724	788	-8.8	1576	1790	-13.6	2623	2610	0.5
004	OKU-659	89.35	93.4	4.05	210	163	22.4	460	373	18.9	1710	1610	5.8
005	OKU-659	104.7	110.25	5.55	230	253	-10.0	370	424	-14.6	2100	2090	0.5
006	OKU-659	110.25	114.9	4.65	210	214	-1.9	320	352	-10.0	1470	1370	6.8
008	OKU-667	40.39	42.09	1.7	121	118	2.5	199	170	14.6	3780	3230	14.6
009	OKU-667	42.09	43.44	1.35	174	139	20.1	541	374	30.9	8970	7610	15.2
010	OKU-667	43.44	46.1	2.66	136	96	29.4	92	46	50.0	3400	2260	33.5
011	OKU-667	46.1	47.72	1.62	114	93	18.4	511	482	5.7	4300	3280	23.7
026	OKU-667	47.72	50.38	2.66	73	38	47.9	373	301	19.3	2977	2100	29.5
027	OKU-671	27.7	28.9	1.2	53	29	45.3	483	491	-1.7	1276	1140	10.7
028	OKU-671	28.9	32.1	3.2	51	28	45.1	498	239	52.0	417	271	35.0

Table 9-4 Continues

Sample ID	Hole ID	From m	To m	Length m	OKU Co ppm	Reassay Co ppm	Difference %	OKU Cu ppm	Reassay Cu ppm	Difference %	OKU Ni ppm	Reassay Ni ppm	Difference %
074		91.2	95.35	4.15	356	451	-26.7	925	803	13.2	2181	2270	-4.1
075	OKU-680	99.7	101.45	1.75	1594	1125	29.4	3750	3360	10.4	4200	2970	29.3
076	OKU-680	101.45	105.65	4.2	730	650	11.0	826	723	12.5	2135	1840	13.8
077	OKU-680	105.65	106.85	1.2	1228	1470	-19.7	2905	3790	-30.5	4090	3740	8.6
078	OKU-680	106.85	108.6	1.75	514	516	-0.4	456	462	-1.3	1965	1910	2.8
080	OKU-680	108.6	117	8.4	140	138	1.4	275	228	17.1	1536	1470	4.3
081	OKU-680	119.5	121.75	2.25	362	377	-4.1	216	120	44.4	1472	1510	-2.6
082	OKU-680	121.75	124.75	3	854	692	19.0	1187	1230	-3.6	3330	2580	22.5
083	OKU-680	124.75	129.05	4.3	160	175	-9.4	145	98	32.4	1666	1740	-4.4
084	OKU-680	139.15	142.4	3.25	95	83	12.6	517	336	35.0	1313	1290	1.8
507	OKU-681	108.8	112.1	3.3	470	718	-52.8	650	938	-44.3	2230	3080	-38.1
508	OKU-681	112.1	114	1.9	1150	1250	-8.7	1290	1270	1.6	4800	4770	0.6
509	OKU-681	114	117.6	3.6	290	329	-13.4	1410	1130	19.9	2220	2290	-3.2
510	OKU-681	117.6	118.95	1.35	110	170	-54.5	110	86	21.8	1580	2560	-62.0
511	OKU-681	118.95	122.8	3.85	120	131	-9.2	40	23	42.5	1130	1280	-13.3
086	OKU-684	97.85	99.55	1.7	1416	1260	11.0	3320	2800	15.7	4290	3780	11.9
087	OKU-684	99.55	103	3.45	665	764	-14.9	730	771	-5.6	2736	2830	-3.4
088	OKU-684	103	105.45	2.45	981	903	8.0	1523	1170	23.2	4020	3770	6.2
089	OKU-684	105.45	109.05	3.6	442	531	-20.1	624	872	-39.7	2246	2330	-3.7
090	OKU-684	109.05	112.35	3.3	1383	1780	-28.7	1437	1180	17.9	4660	4340	6.9
092	OKU-684	112.35	118.3	5.95	354	434	-22.6	402	373	7.2	2289	2500	-9.2
093	OKU-684	118.3	119.85	1.55	1428	1305	8.6	4140	3240	21.7	4910	4430	9.8
094	OKU-684	119.85	120.9	1.05	437	366	16.2	7930	6000	24.3	1795	1710	4.7
095	OKU-684	120.9	125.35	4.45	116	101	12.9	191	186	2.6	1391	1310	5.8
116	OKU-685	85	86.5	1.5	404	578	-43.1	999	1120	-12.1	3240	4170	-28.7
117	OKU-685	86.5	91.5	5	275	313	-13.8	856	704	17.8	2531	2500	1.2
118	OKU-685	96.55	100.3	3.75	835	791	5.3	1888	1790	5.2	3790	3370	11.1
119	OKU-685	100.3	102.9	2.6	416	509	-22.4	275	255	7.3	2934	2850	2.9
120	OKU-685	108.95	115.75	6.8	288	316	-9.7	228	235	-3.1	2309	2380	-3.1
122	OKU-685	115.75	117.8	2.05	453	485	-7.1	1250	1580	-26.4	2225	2160	2.9
101	OKU-689	87.85	89.05	1.2	1162	1490	-28.2	4270	3370	21.1	4350	5050	-16.1
102	OKU-689	89.05	90.05	1	1016	1330	-30.9	3480	4920	-41.4	3970	4220	-6.3
104	OKU-689	90.05	92.95	2.9	1224	1115	8.9	9800	9620	1.8	3700	2840	23.2
105	OKU-689	92.95	96.7	3.75	614	691	-12.5	1167	1770	-51.7	2338	2410	-3.1
106	OKU-689	96.7	98	1.3	1338	1515	-13.2	4370	5740	-31.4	6110	6200	-1.5
107	OKU-689	98	100.85	2.85	691	633	8.4	571	609	-6.7	3300	2610	20.9
108	OKU-689	100.85	104.55	3.7	305	429	-40.7	210	409	-94.8	1891	2100	-11.1
110	OKU-689	104.55	106.7	2.15	1626	1885	-15.9	4320	5800	-34.3	5410	5930	-9.6
111	OKU-689	106.7	110.9	4.2	424	458	-8.0	289	169	41.5	4650	4120	11.4
112	OKU-689	110.9	116.85	5.95	395	506	-28.1	251	239	4.8	2263	2560	-13.1
113	OKU-689	116.85	118.7	1.85	934	879	5.9	3690	5980	-62.1	3670	3200	12.8
114	OKU-689	118.7	122.85	4.15	113	118	-4.4	185	194	-4.9	1301	1360	-4.5
503	OKU-695	96.4	101.65	5.25	583	638	-9.4	1729	1800	-4.1	2274	2350	-3.3
504	OKU-695	101.65	105.05	3.4	558	638	-14.3	670	611	8.8	1795	1960	-9.2
505	OKU-695	105.05	109.05	4	558	571	-2.3	673	394	41.5	2216	2150	3.0
501	OKU-822	102.2	104	1.8	820	1015	-23.8	931	718	22.9	3560	3360	5.6
502	OKU-822	114.85	119.6	4.75	379	468	-23.5	879	554	37.0	3610	3690	-2.2
096	OKU-833	66.2	69.15	2.95	860	961	-11.7	3150	4630	-47.0	3610	3400	5.8
098	OKU-833	69.15	71.05	1.9	2200	1925	12.5	3330	3890	-16.8	11090	10400	6.2
064	OKU-835	59.15	61.25	2.1	2870	2190	23.7	6460	6190	4.2	8150	6190	24.0
065	OKU-835	61.25	64.35	3.1	880	883	-0.3	2450	1800	26.5	3580	3220	10.1
066	OKU-835	66.15	67.15	1	800	599	25.1	5310	1270	76.1	2620	2200	16.0
068	OKU-835	68.35	69.85	1.5	1930	1885	2.3	15200	13550	10.9	6680	6810	-1.9
069	OKU-835	69.85	71.9	2.05	820	782	4.6	3310	4230	-27.8	2950	2780	5.8
070	OKU-835	71.9	73.25	1.35	1300	1725	-32.7	17900	18200	-1.7	4010	5110	-27.4
071	OKU-835	73.25	76.95	3.7	1030	1030	0.0	1650	1600	3.0	3130	3080	1.6
072	OKU-835	76.95	79.15	2.2	960	757	21.1	860	674	21.6	3640	3210	11.8
522	OKU-836	56	57.4	1.4	520	609	-17.1	910	882	3.1	1870	2040	-9.1
523	OKU-836	57.4	59.35	1.95	1970	1845	6.3	3860	2590	32.9	5140	4960	3.5
525	OKU-836	59.35	63.3	3.95	730	717	1.8	2540	2350	7.5	2530	2450	3.2
526	OKU-836	63.3	64.75	1.45	2600	1770	31.9	28220	19000	32.7	9080	6140	32.4
527	OKU-836	66.05	69.45	3.4	630	617	2.1	1270	782	38.4	2250	2180	3.1
519	OKU-839	71.1	73.85	2.75	680	627	7.8	1660	1370	17.5	2730	2170	20.5
520	OKU-839	73.85	78.65	4.8	320	428	-33.8	610	789	-29.3	2160	2610	-20.8
521	OKU-839	78.65	81.35	2.7	330	276	16.4	580	576	0.7	2610	2380	8.8
533	OKU-849	40.05	41.7	1.65	310	332	-7.1	5100	5080	0.4	2530	2460	2.8
534	OKU-849	46.5	48.5	2	80	77	3.8	280	351	-25.4	2720	2220	18.4

## 10 Data Verification

### 10.1 Database Validation

The resource database was validated for double assays, overlapping intervals and missing data. Drill holes used in resource estimation passed the validation. However, the database contains some errors that should be fixed in future.

### 10.2 Down-Hole Survey Validation

The drill hole data was validated by checking the consistency of consecutive survey results.

### 10.3 Assay Verification

The collar, geology, survey and assay files were provided in Microsoft Access®. All From-To data are either zero or a positive value. No intervals exceeded the total depth of its drill hole. Intervals with no assay data were listed as blank in the database.

### 10.4 Geologic Data Verification and Interpretation

The author has compared the lithological drill core loggings against the drill core photos taken during the drill core logging process.

### 10.5 QA/QC Protocol

Quality control and quality assurance work are well documented from the drilling campaign done by FinnCobalt Oy. Finn Nickel era sampling and QA/QC protocol are documented but the procedures used are not as high as current day standards. Nevertheless, the data collected by Finn Nickel Oy is in CP's opinion suitable to be used in this resource estimate work as is Outokumpu era data.

### 10.6 Conclusion

After reviewing the available data the author considers the drill hole data to be suitable for estimation and reporting of the Mineral Resource estimate.

## 11 Mineral Resource Estimates

The Mineral Resource estimate has been prepared by Ville-Matti Seppä/ AFRY Finland Oy. Mr Seppä has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being 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". The data that has been used for this work has collected and compiled during the last mineral resource estimate work done by Outotec (Finland) Oy, dated 15<sup>th</sup> March 2009 and from the latest drilling campaign conducted by FinnCobalt Oy in 2020.

The CP is not aware of any known environmental, permitting, legal, title, taxation, socioeconomic, marketing, political or other similar factors that could materially affect the stated Mineral Resource estimate.

### 11.1 Data

The Hautalampi database was provided by FinnCobalt Oy in the form of an Access<sup>®</sup> database containing collar locations, down-hole survey information, geologic data and assay results, density measurements, susceptibility measurements, structural measurements, and Q-value loggings. Digital copies of drill core photos, historic reports and Keretti mine maps / geological interpretations were also available. Drillhole locations from different drilling campaigns are presented in Figure 11-1.

The resource database contains data from four different drilling campaigns (Table 11-1) and assays from elements: Ag, As, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, Pb, S, Sb, Zn and Au. The lithology file contains 61 different lithological units.

*Table 11-1 Summary of Resource database. \*Sludge drilling data was not used in resource estimation.*

Campaign	Holes	Length	Samples		
			Ni	Cu	Co
HA	29	3768	1 472	1 472	1 472
k	27	4808	376	376	157
HL	100	11153	2 736	2 734	2 736
OKU	301	62411	6 575	6 610	6 534
Total	457	82140	11 159	11 192	10 899
s*	102	1684	2 268	2 268	2 262

*Notes:*

<i>Campaign</i>	<i>Description</i>	<i>Assaying</i>
HA	2020, FinnCobalt Oy	ICP-AES
HL	2007–2008, Finn Nickel Oy	ICP/AAS
OKU	1950–1987, Outokumpu Oy Exploration and Keretti Mine	AAS/ICP
k	1950–1986, Outokumpu Keretti mine, underground drilling	AAS
s	1985–1987, Outokumpu, tunnelling project, sludge drilling.	X-Met

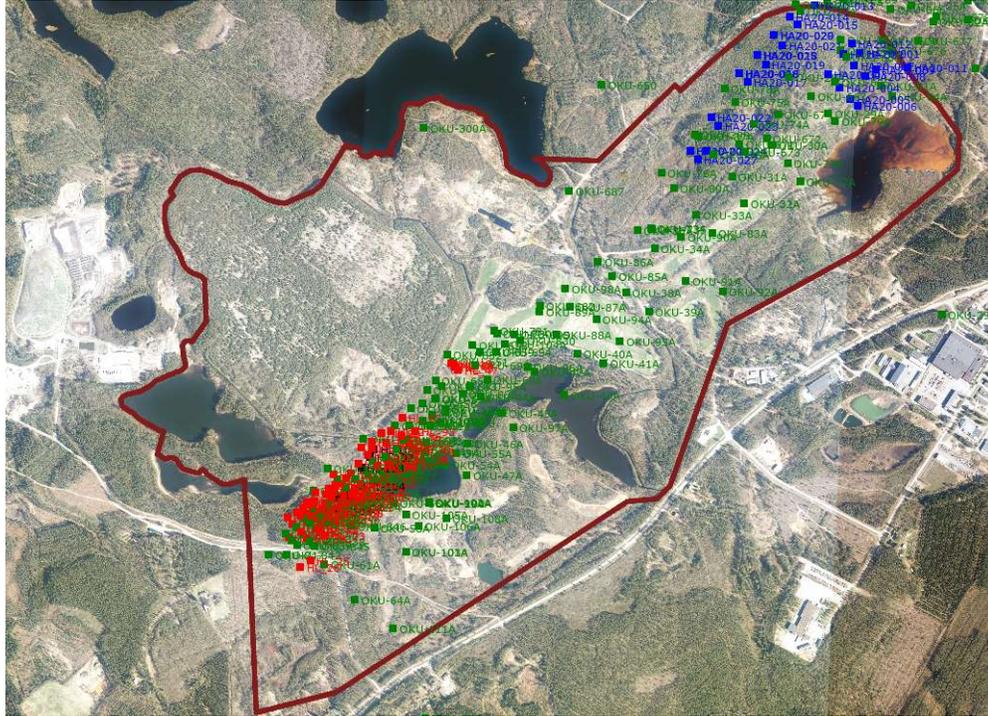


Figure 11-1 Drillholes from different drilling campaigns in relation to the mining concession. (Green=Outokumpu Oy, Red=Finn Nickel Oy, Blue = FinnCobalt Oy)

## 11.2 Resource modelling

The resource model for the Hautalampi project was created with Seequent LeapFrog Geo software. Numeric Ni-equivalent composites were created which were then used to create the resource solids. NiEq grade was calculated using the following prices:

- nickel US \$17,500 /t
- copper US\$ 7,500 /t
- cobalt US\$ 45,000 /t

NiEq grade calculation =  $Ni\% + (Co\% * 45000 + Cu\% * 7500) / 17500$ .

No metallurgical or recovery factors have been assumed at this stage of the Project. USD/EUR exchange rate of 1.18 was used.

Modelling cut-off was selected to be 0.3 % NiEq, based on the following assumptions for underground mining and processing costs:

• Drilling and blasting	10 € / tonne
• Mucking	5 € / tonne
• Trucking	5 € / tonne
• Backfilling	5€ / tonne
• Processing costs	10 € / tonne
<b>Total</b>	<b>35 € / tonne</b>

The value of processed material with 0.3% NiEq and with nickel price of UD \$ 17,500 is 44.49 EUR which is well above the selected modelling cut-off and thus

it is suitable to be used in this project. The compositing length for NiEq composites was selected to be 1.0 meters. The residual end length of the composite less than 0.2 meters was discarded. The resource modelling process was aided by accepting small inclusions of material with less than 0.3 % NiEq inside the solids.

Nine ore lenses were modelled to Hautalampi deposit using the intrusion tool in Leapfrog software (Figure 11-2). The interpolation was guided by inserting polylines and points and assigning individual trends to each created solid.

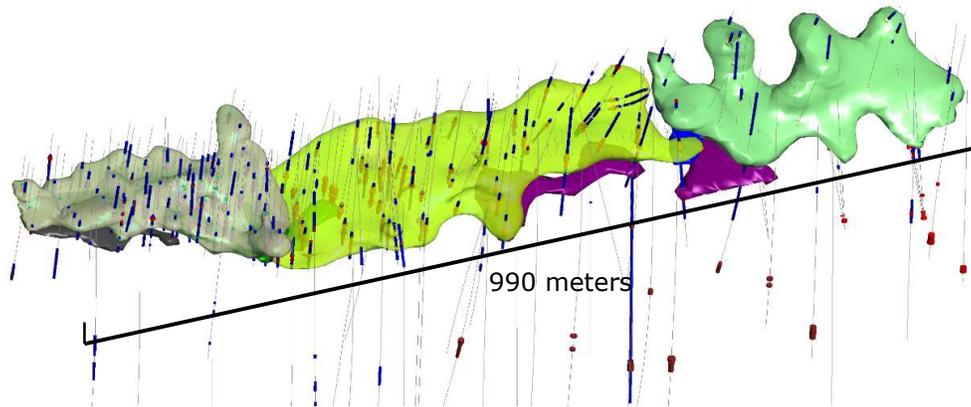


Figure 11-2 Oblique view of Hautalampi resource model. Looking towards North-East.

For the Mökkivaara area, four solids were modelled (Figure 11-3). Both Hautalampi and Mökkivaara models used drill holes drilled by Outokumpu, Finn Nickel Oy and FinnCobalt Oy, sludge holes were not used in resource modelling or grade estimation.

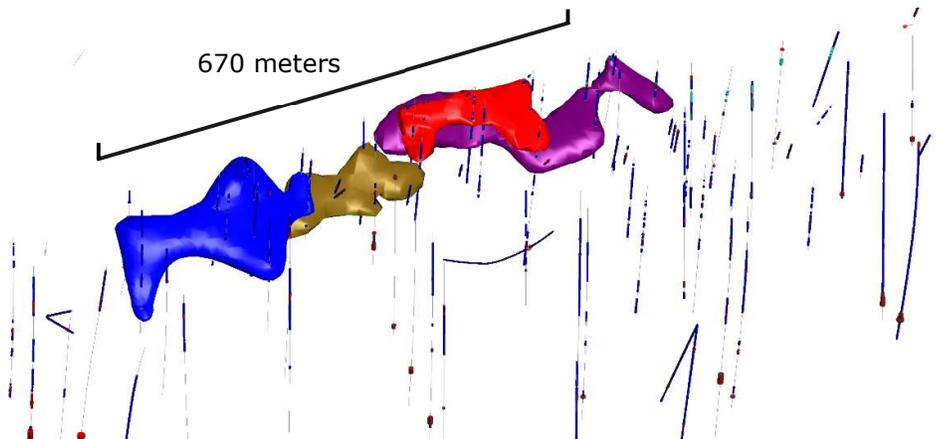


Figure 11-3 Oblique view of Mökkivaara resource model. Looking towards North-East.

Figure 11-4 shows the location of Hautalampi and Mökkivaara resource models in relation to FinnCobalt Oy's mining concession. The northernmost tip of the Mökkivaara model is outside of the mining concession and the volumes that are outside are not included in this report's estimations. The total length of the Hautalampi modelled mineralisation is 990 meters along the strike of the deposit. The vertical extent of the Hautalampi model is 130 meters but local variations exist. Mökkivaara mineralisation length along the strike is 670 meters.

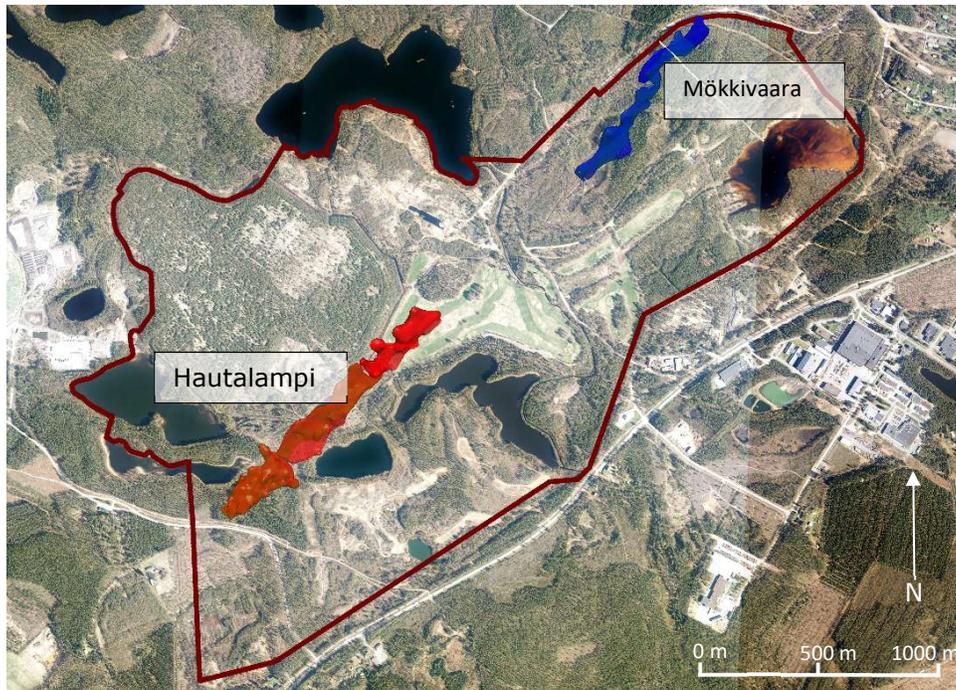


Figure 11-4 Aerial views of Hautalampi and Mökkivaara Resource models

### 11.3 Drill hole compositing

The resource estimate was based on resource intersections defined using the wireframes of the mineralized zones. Intersection data was used to extract samples for statistical analysis and for compositing the data for grade interpolation. Drill hole sample composites were generated to standardize the data for further statistical evaluation which would eliminate any adverse effects related to sample length. The average assay interval in the database for samples above 0.3 % NiEq is 2.1 meters. The average assay interval length in HL and HA drilling campaigns were 1.3 meters. For the resource estimation, the drill holes were composited to be 1.5 meters in length. The selected length honours the created resource model boundaries. Basic statistics related to the Hautalampi composites used in grade estimates are presented in Table 11-2. The data set shows a fairly low Coefficient of Variation (CV) for Ni and Co. Usually, values less than 0.5 indicates a fairly well-behaved set of data, meaning low variability of the data. CV for Cu is higher than Ni or Co but it's still at an acceptable level and shows that the data can be used for predictive

models. CV values greater than 2.0 or 2.5 indicates a distribution of data with significant variability, such that some predicative models may not be appropriate.

*Table 11-2 Basic statistics of the Hautalampi composited data used in the grade estimations.*

Variable	1.5 m composites		
	Ni (ppm)	Cu (ppm)	Co (ppm)
Number of samples	2155	2155	2155
Minimum value	605	0	50
Maximum value	30671	60400	6833
Mean	3396	2497	783
Median	2922	1233	600
Geometric Mean	2999	Not Calculated	591
Variance	3777727	14367051	389676
Standard Deviation	1944	3790	624
Coefficient of variation	0.57	1.52	0.80

Basic statistics of Mökkivaara composites are presented in (Table 11-3). CV for nickel and cobalt is at a good level but a value of 2.88 for copper can indicate a possible uncertainty in the models. In Mökkivaara case the high variance is caused by a small number of high Cu grades.

*Table 11-3 Basic statistics of the Mökkivaara composited data used in the grade estimations.*

Variable	1.5 m composites		
	Ni (ppm)	Cu (ppm)	Co (ppm)
Number of samples	301	301	301
Minimum value	213	9	24
Maximum value	7153	39100	2416
Mean	2367	1351	501
Median	2200	682	446
Geometric Mean	2198	621	401
Variance	956293	15135875	108889
Standard Deviation	978	3890	330
Coefficient of variation	0.41	2.88	0.66

#### 11.4 Block model

The block model created for this resource estimation is made up of 5 m x 5 m x 5 m parent blocks and 2.5 m x 2.5 m x 2.5 m sub-blocks. The block model is rotated 45 degrees around the z-axis to match the general strike of the mineralized bodies. The selected block size was selected partly based on the drilling density and partly to match the geometric constraints. The summary of the block model parameters is given in Table 11-4.

Table 11-4 FinnCobalt resource block model parameters

Type	Y	X	Z	
Minimum Coordinates	6956362.5	4447194	-100	
Maximum Coordinates	6957162.5	4449994	160	
User Block Size		5	5	5
Min. Block Size		2.5	2.5	2.5
Rotation		-45	0	0

Attribute Name	Type	Decimals	Background	Description
anisotropic_dist_to_nearest	Real	3	-99	
average_anisotropic_dist	Real	3	-99	
average_true_distance	Real	3	-99	
block_variance	Real	3	-99	
co	Float	3	0	resource grade (ppm)
cu	Float	3	0	resource grade (ppm)
cu_eq	Float	3	0	(Cu%+Ni%*17500+Co%*45000)/7500
distance_to_dh	Real	3	-99	
fe	Float	3	0	resource grade (ppm)
id2_co	Float	2	-99	grade validation, invercedistance, Co
id2_cu	Float	2	-99	grade validation, invercedistance, Cu
id2_ni	Float	2	-99	grade validation, invercedistance, Ni
kriging_variance_co	Real	3	-99	
kriging_variance_cu	Real	3	-99	
krigink_efficiency	Real	3	-99	
krigink_variance	Real	3	-99	
lagrange_multiplier	Real	3	-99	
ni	Float	3	0	resource grade (ppm)
ni_eq	Float	3	0	Ni% + (Co%*45 000+Cu%*7 500)/17 500
nn	Float	2	0	closest sample
nn_co	Float	2	-99	grade validation, nearest neighbour, Co
nn_cu	Float	2	-99	grade validation, nearest neighbour, Cu
nn_ni	Float	2	-99	grade validation, nearest neighbour, Ni
number_of_drillholes	Integer	-	-99	
number_of_negative_weights	Integer	-	-99	
number_of_samples	Integer	-	-99	
resource_class	Integer	-	0	1=measured, 2=indicated, 3=inferred, 4= mineralised material outside mining concession
s	Float	3	0	resource grade (ppm)
sg	Float	2		specific gravity
true_dist_to_nearest	Real	3	-99	
zn	Float	3	0	resource grade (ppm)

## 11.5 Geostatistical analysis and kriging parameters

For the Hautalampi deposit, mineralisation continuity for Ni, Cu, Co, S, Fe and Zn was examined by using variogram analysis. Variography was used to examine the spatial relationship between composites and to identify the directions of mineralisation continuity and quantify the ranges of grade continuity. As a result, kriging parameters were obtained for resource estimation. The experimental variograms were calculated with the major axis aligned along the main mineralisation strike, the second was aligned in the plane of mineralisation at 90° to the first orientation. And the third was orientated perpendicular to the mineralisation plane, across the width of the mineralisation.

The variograms displayed reasonable structure, and the best continuity was observed to be in the plunge direction of the mineralisation. The variograms created for Ni, Cu and Co are shown in Figure 11-5, Figure 11-6 and Figure 11-7 respectively.



Figure 11-5 Experimental variogram models for Ni

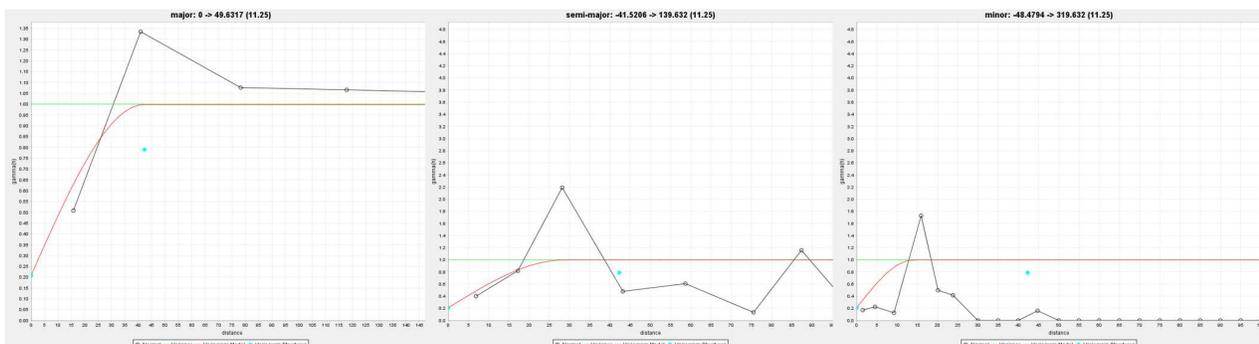


Figure 11-6 Experimental variogram models for Cu

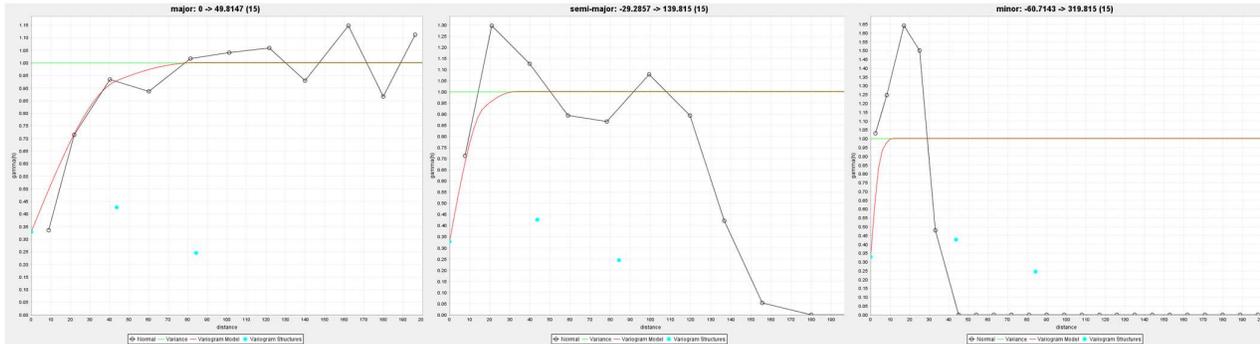


Figure 11-7 Experimental variogram models for Co

## 11.6 Grade interpolation

For the Hautalampi deposit, all elements (Ni, Cu, Co, S, Fe, Zn) were estimated by using Ordinary Kriging (OK) interpolation. For the Mökkivaara deposit, the elements were estimated by using an inverse distance squared (ID2) method. In Mökkivaara the major, semi-major and minor axes of the search ellipsoid were set to match the geometry of the Mökkivaara mineralisation.

Interpolation parameters for the estimation are shown below in Table 11-5. the Second pass with doubled range was used if empty blocks remained after initial interpolation.

Table 11-5 Interpolation parameters used

Hautalampi											
		C1	C2	Range	Azimuth	Plunge	Dip	Semi Ratio	Minor Ratio	Min samples	Max samples
Ni	Pass 1	0.638		115.0	39.02	0	-19.16	2.77	9.55	3	15
	Pass 2	0.638		180.0	39.02	0	-19.16	2.77	9.55	3	15
Cu	Pass 1	0.790		42.3	49.63	0	-41.521	1.425	3.115	3	15
	Pass 2	0.790		90.0	49.63	0	-41.521	1.425	3.115	3	15
Co	Pass 1	0.427		43.7	49.82	0	-29.285	2.523	7.791	3	15
			0.25	84.4	49.82	0	-29.285	2.523	7.791	3	15
S	Pass 1	0.979		125.7	33.22	0	-38.572	3.112	9.193	3	15
Fe	Pass 1	0.881		129.8	58.78	0	-43	1	1.376	3	15
Zn	Pass 1	0.802		56.0	49.69	0	-50.19	1.288	2.89	3	15
	Pass 2	0.802		120.0	49.69	0	-50.19	1.288	2.89	3	15
Mökkivaara											
				Range	Azimuth	Plunge	Dip	Semi Ratio	Minor Ratio	Min samples	Max samples
All elements	Pass 1			120	30.2	0	-43.93	1.59	1.96	5	20

### 11.7 Bulk Density

Bulk density was estimated based on available density measurements. A total of 2054 samples were available and from those 478 were inside modelled resource solids. 1067 samples were outside of resource solids and were taken from samples below the selected modelling cut-off of 0.3 % NiEq. Statistics for the Density measurements are presented below (Table 11-6). A density of 2.82 was used for both waste and mineralised material.

Table 11-6 Statistics for bulk density data

	Number of intersections	Length	Mean	Standard deviation	Coefficient of variation	Variance
Inside resource model	478	223.54	2.82	0.132	0.047	0.018
waste	1067	310.28	2.82	0.160	0.057	0.026
All	2054	602.32	2.82	0.160	0.057	0.026

### 11.8 Mineral resource classification

Mineral Resource classification was considered based on drill hole spacing, continuity of mineralisation and data quality. Throughout the Hautalampi and Mökkivaara deposits, the grade continuity is good, with generally uniform Ni Cu and Co grades. Measured class material is located in the area where the drill section spacing is generally 20 meters. Indicated material has drill section spacing of 20 to 40 meters and inferred material has spacing generally greater than 50 meters. Kriging variance was also considered in the resource classification process. Generally, areas measured category material has kriging variance of 0 to 0.4 were as indicated class the variance is in the range on 0.2 to 0.6. In measured class, the average true distance to samples is below 25 meters and in indicated class, in most cases, the average true distance is over 25 meters. Resource classes are illustrated below (Figure 11-8):

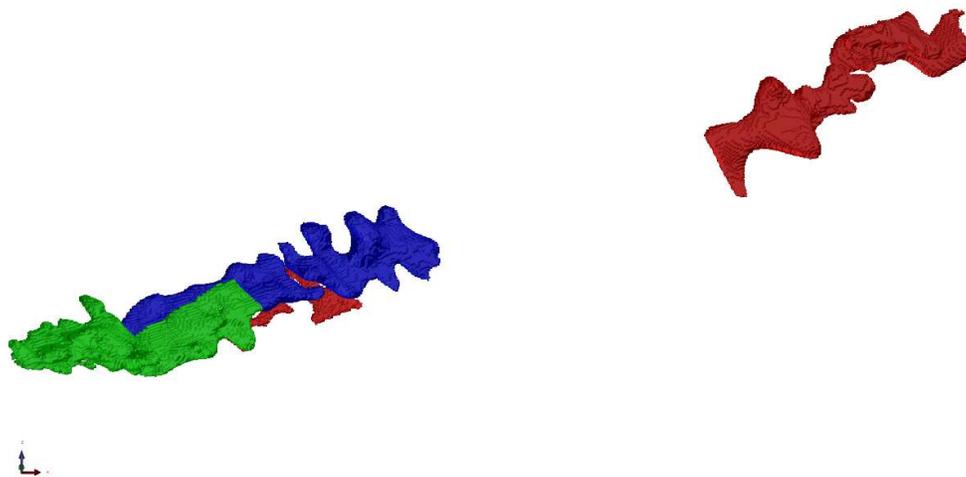


Figure 11-8 FinnCobalt Oy resources (Blue=Measured, Green= Indicated, Red =inferred resource class)

## 11.9 Cut-off

The “reasonable prospects for eventual economic extraction” requirement mentioned in the JORC 2012 Code generally implies that quantity and grade estimates meet certain economic thresholds and that mineral resources are reported at an appropriate cut-off grade that takes into account extraction scenarios and processing recovery.

To ensure that the mineral resource estimate can be considered for eventual economic extraction, the following economic assumptions and operating costs have been used (Table 11-7):

*Table 11-7 Assumed commodity prices and CAPEX costs*

Prices:		
Nickel price	17,500	US\$ / tonne
Copper price	7,500	US\$ / tonne
Cobalt price	45,000	US\$ / tonne
US \$/EUR exchange rate	1.18	
OPEX:		
Drilling and blasting	10	€ / tonne
Mucking	5	€ / tonne
Trucking	5	€ / tonne
Backfilling	5	€ / tonne
Processing costs	10	€ / tonne

A cut-off value for NiEq was estimated by using a NiEq value calculation (NVC). The (NVC) represents the combined metal values for nickel, copper and cobalt in the mineralized material.

The metal prices were provided by FinnCobalt Oy and they are based on the World Bank commodities overview April 2021 publication. The mining costs were estimated assuming contractor mining and using AFRY Finland Oy in-house prices from similar-sized mining operations and FinnCobalt Oy’s internal reference prices.

The NVC values (€/ tonne) for a mineralized material tonne were calculated using varying NiEq grades. The NVC was then compared against the operating cost (OPEX) broken down in Table 11-7 to see what the break-even value and the related cut-off grade should be. Using the assumed metal prices and operating costs the break-even cut-off grade is estimated to be 0.25 % NiEq (Figure 11-9). The selected modelling and reporting cut-off is supported by the estimated break-even cut-off. It should be noted that the NVC calculation is based on assumed economic and technical parameters presented earlier (Table 11-7).

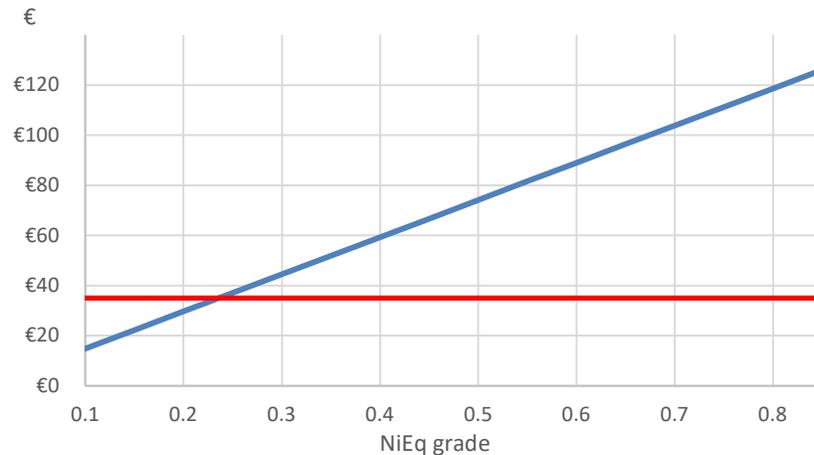


Figure 11-9 Cut-off breakeven calculation

### 11.10 Mineral Resources

Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore reserves (The JORC Code 2012) define a mineral resource as:

“A ‘Mineral Resource’ is a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

Table 11-8 below summarizes the Hautalampi mineral resources using a NiEq cut-off grade of 0.3%. The author is not aware of any factors related to environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors which could materially affect the mineral resource estimate contained in this Report.

Table 11-8 Hautalampi Mineral Resources as of the June 21<sup>st</sup>, 2021 @ 0.3% NiEq cut-off

<b>Hautalampi</b>						
	Tonnes (t)	Ni %	Cu %	Co %	Ni Eq %	Cu Eq %
Measured	2 582 000	0.38	0.28	0.08	0.72	1.67
Indicated	2 701 000	0.31	0.20	0.08	0.61	1.42
total M&I	5 283 000	0.35	0.24	0.08	0.66	1.54
Contained Metals	tonnes	18289	12783	4337		

The Mökkivaara deposit and parts of Hautalampi are in Inferred Mineral Resource class. The FinnCobalt Oy's Inferred mineral resources are reported below (Table 11-9 and Table 11-10). There are not sufficient data to categorise these resources into Indicated resources. However, most of the inferred mineral resources can be upgraded to indicated mineral resources with diamond drilling.

Table 11-9 Hautalampi Inferred Mineral Resources as of the June 21<sup>st</sup>, 2021 @ 0.3% Ni Eq cut-off

<b>Hautalampi</b>						
	Tonnes (t)	Ni %	Cu %	Co %	Ni Eq %	Cu Eq %
Inferred	195 000	0.26	0.14	0.05	0.45	1.04
Contained Metals	tonnes	505	267	98		

Table 11-10 Mökkivaara Inferred Mineral Resources as of the June 21<sup>st</sup>, 2021 @ 0.3% Ni Eq cut-off

<b>Mökkivaara</b>						
	Tonnes	Ni %	Cu %	Co %	Ni Eq %	Cu Eq %
Inferred	2 186 000	0.25	0.16	0.06	0.46	1.07
Contained Metals	tonnes	5410	3509	1218		

### 11.11 Validation

Validation of the block model was performed visually against the drill hole data in cross-section views (Figure 11-10 and Figure 11-11). The block model was also validated at the domain level by comparing the mean values of the composited and estimated data (Table 11-11). These reviews did not reveal any inconsistencies between block model results and drill hole assays.

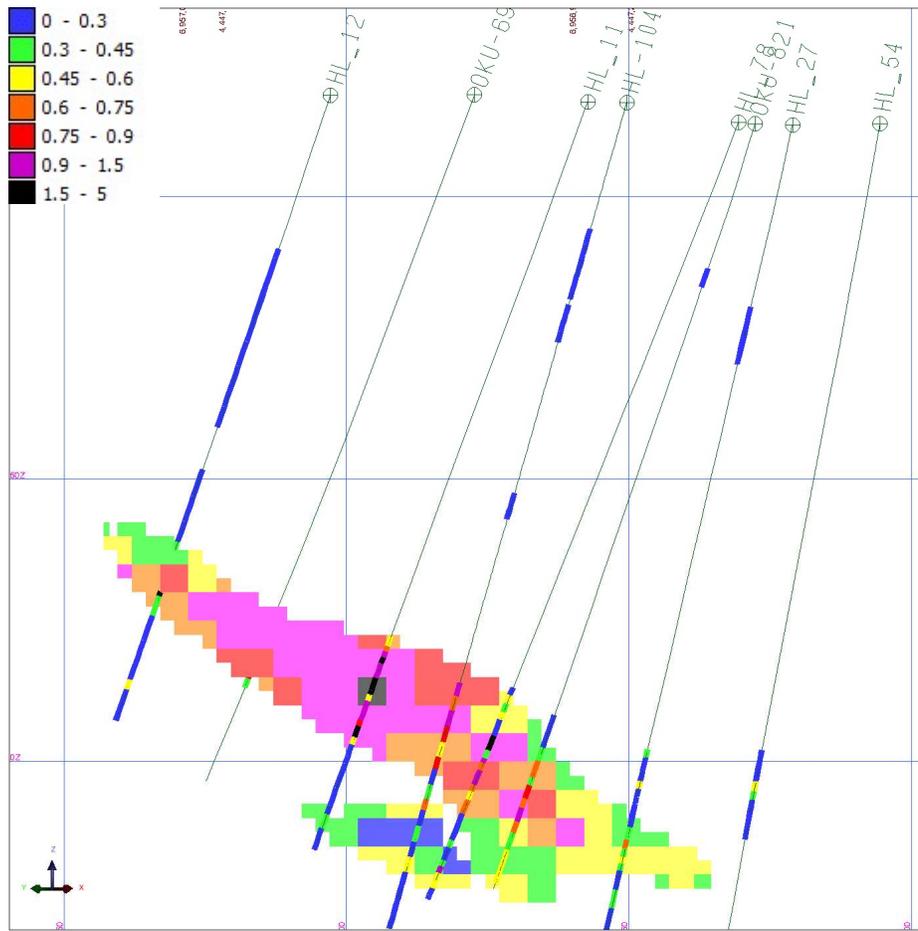


Figure 11-10 Profile 95 viewing North East displaying NiEq % in blocks and drill holes.

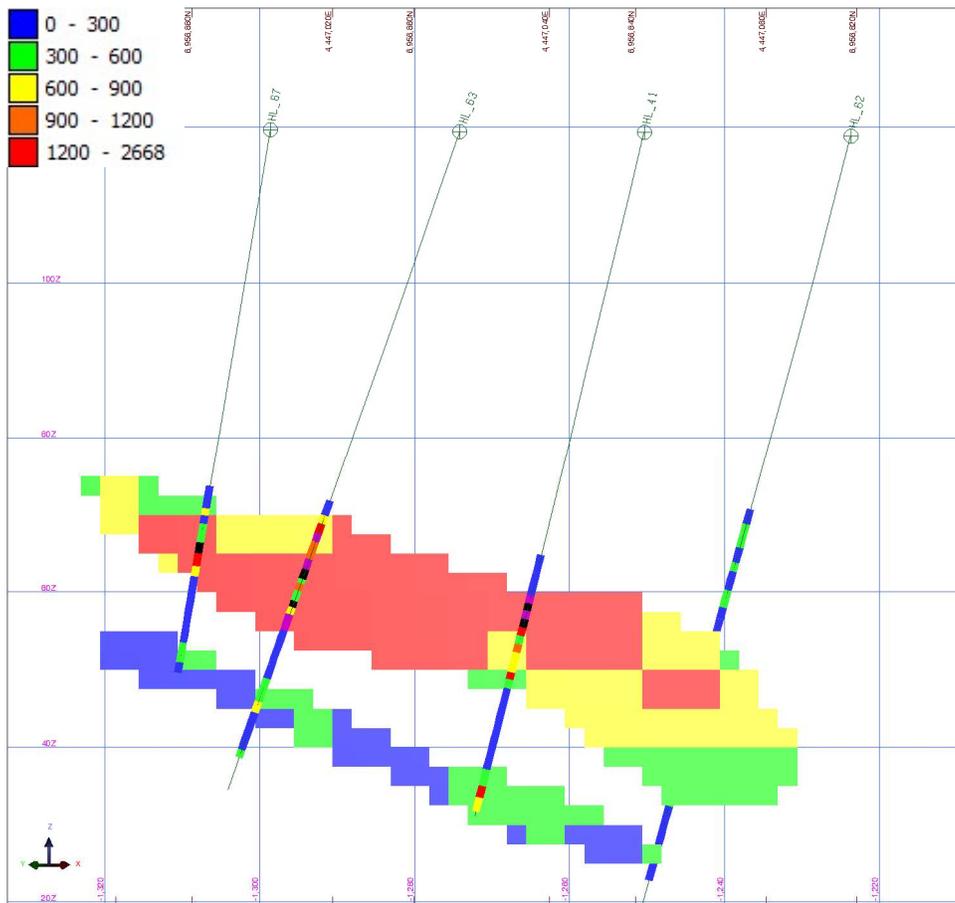


Figure 11-11 Profile 99+20m viewing North East displaying Co grades in blocks and drill holes.

Table 11-11 Basic statistics of the block model and composites used to estimate the block grades.

Variable	1.5 m composites			Blockmodel		
	Inside resource model			Inside resource model		
	Ni (ppm)	Cu (ppm)	Co (ppm)	Ni (ppm)	Cu (ppm)	Co (ppm)
Number of samples	2456	2456	2456	30417	30417	30417
Minimum value	213.3333	0	24.3333	604.733276	0.01	118.259819
Maximum value	30670.6667	60400	6833.3333	30670.66602	38927.95703	2666.073242
Mean	3270	2357	749	3010	2026	692
Median	2736	1155	573	2548	1221	636
Geometric Mean	2887	Not Calculated	563	2733	1419	622
Variance	3545763	14602592	363834	2711710	7316948	108053
Standard Deviation	1883	3821	603	1647	2705	329
Coefficient of variation	0.58	1.62	0.81	0.55	1.34	0.48

According to the basic statistics, there was an acceptable variation between the estimated values and the composited values.

When comparing the volume of the geological 3D solids against the block model cells, a good congruence between the volumes can be seen. Figure 11-12 illustrates an oblique view of the Hautalampi 3D ore solid and the block model.

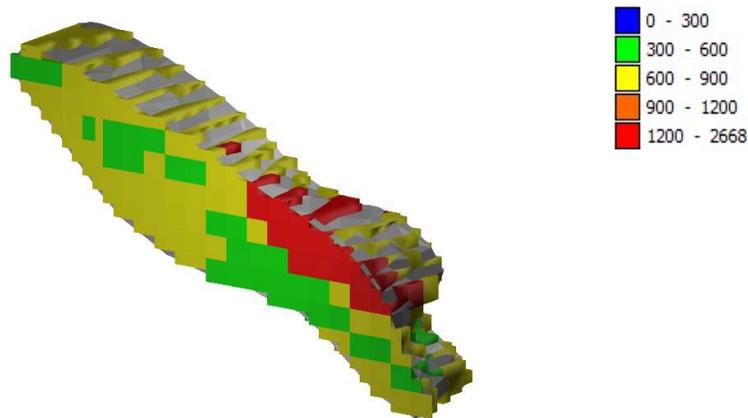


Figure 11-12 Volume comparison of 3D solid vs block model (Co grade)

The total volume difference between the 3D solid and the block model is only 0.03% (Table 11-12) and can be concluded that the volume difference is in a good range.

Table 11-12 Volumes of the 3D solid and the reported block model cells

<b>The volume of 3D solid</b>	<b>2 891 781 m<sup>3</sup></b>
<b>The volume of reported block model cells</b>	<b>2 890 953 m<sup>3</sup></b>
<b>% difference</b>	<b>0.03%</b>

The nearest neighbour (NN) method is a fast way to do a global validation of the resource model and it was used for the initial check-in block model validation for Mökkivaara and Hautalampi estimation. In addition to NN validation, also ID2 method was used to validate Hautalampi kriging results. Table 11-13 shows the comparison between the Ordinary kriging, inverse distance and the NN method. All methods produced identical grades for Ni, Cu and Co.

Table 11-13 Comparison between estimation methods

Resource Class	Tonnes Mt	Ni			Cu			Co		
		Kriging %	Nearest neighbour %	Inverse distance %	Kriging %	Nearest neighbour %	Inverse distance %	Kriging %	Nearest neighbour %	Inverse distance %
Measured	2.69	0.37	0.37	0.37	0.28	0.28	0.29	0.08	0.08	0.08
Indicated	2.86	0.30	0.31	0.30	0.19	0.21	0.19	0.08	0.08	0.08
Total M&I	5.55	0.34	0.34	0.33	0.23	0.24	0.24	0.08	0.08	0.08
Inferred	2.51	0.24	0.27	0.24	0.15	0.17	0.15	0.05	0.06	0.05

Swath plot analysis showed a good correlation between the composited grades versus the estimated grades from the block model. Swath plot analyses for Ni, Cu and Co grades are presented in Figure 11-13 (Northing), Figure 11-14 (Easting) and in Figure 11-15 (Elevation).

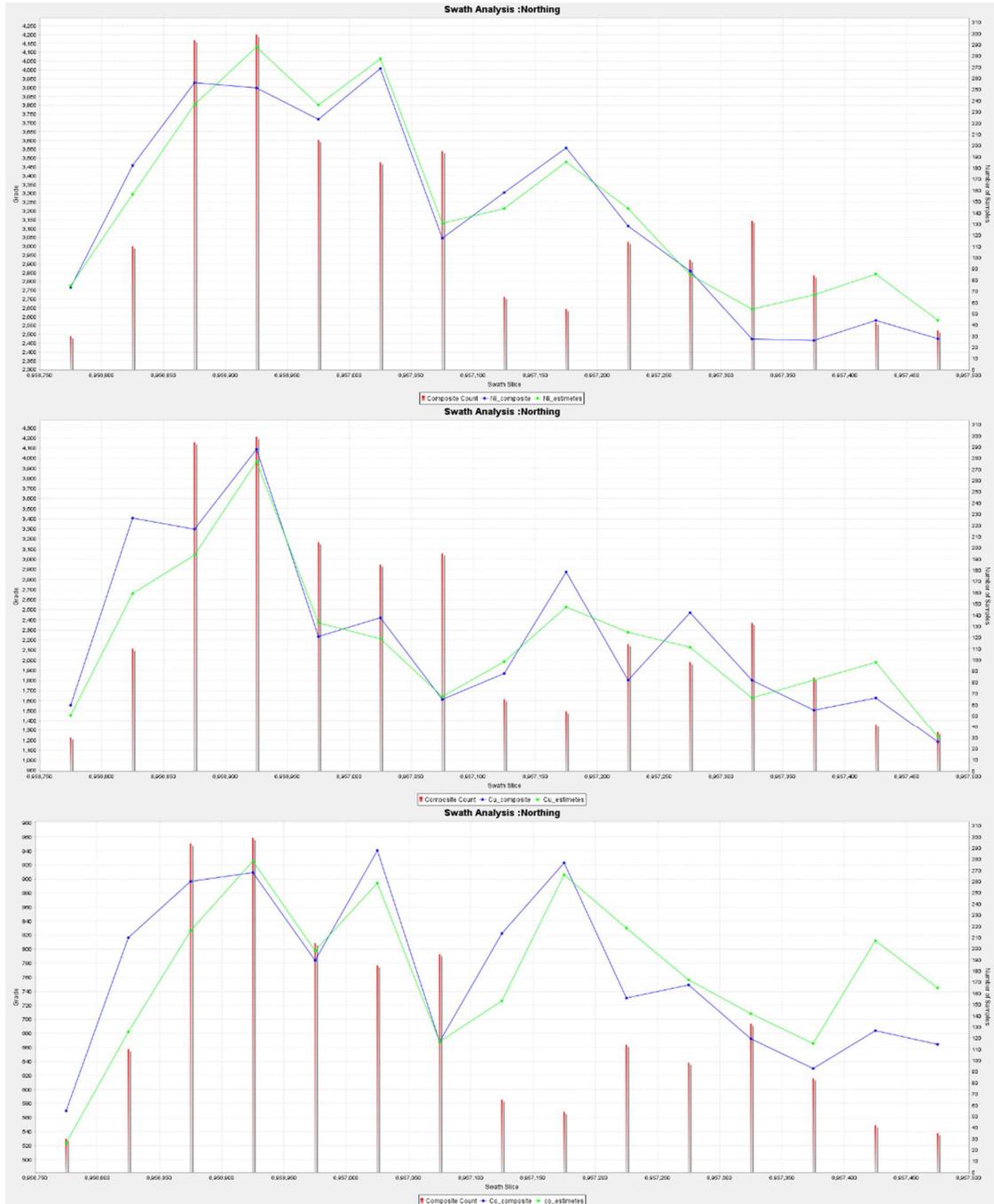


Figure 11-13 Swath plot analysis, Northing. Blue= grade from a composite file, Green= grade from the block model

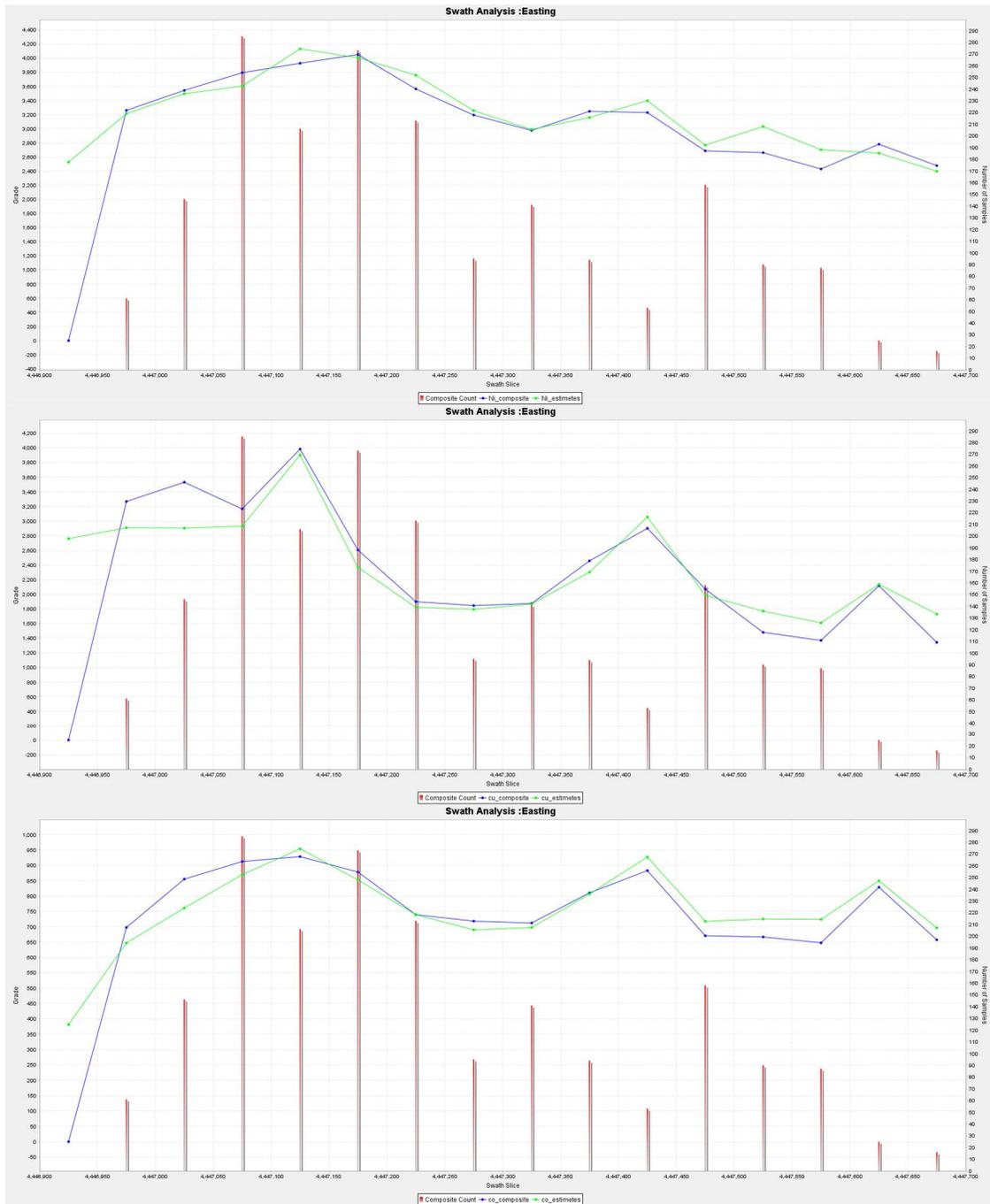


Figure 11-14 Swath plot analysis, Easting. Blue= grade from a composite file, Green= grade from the block model

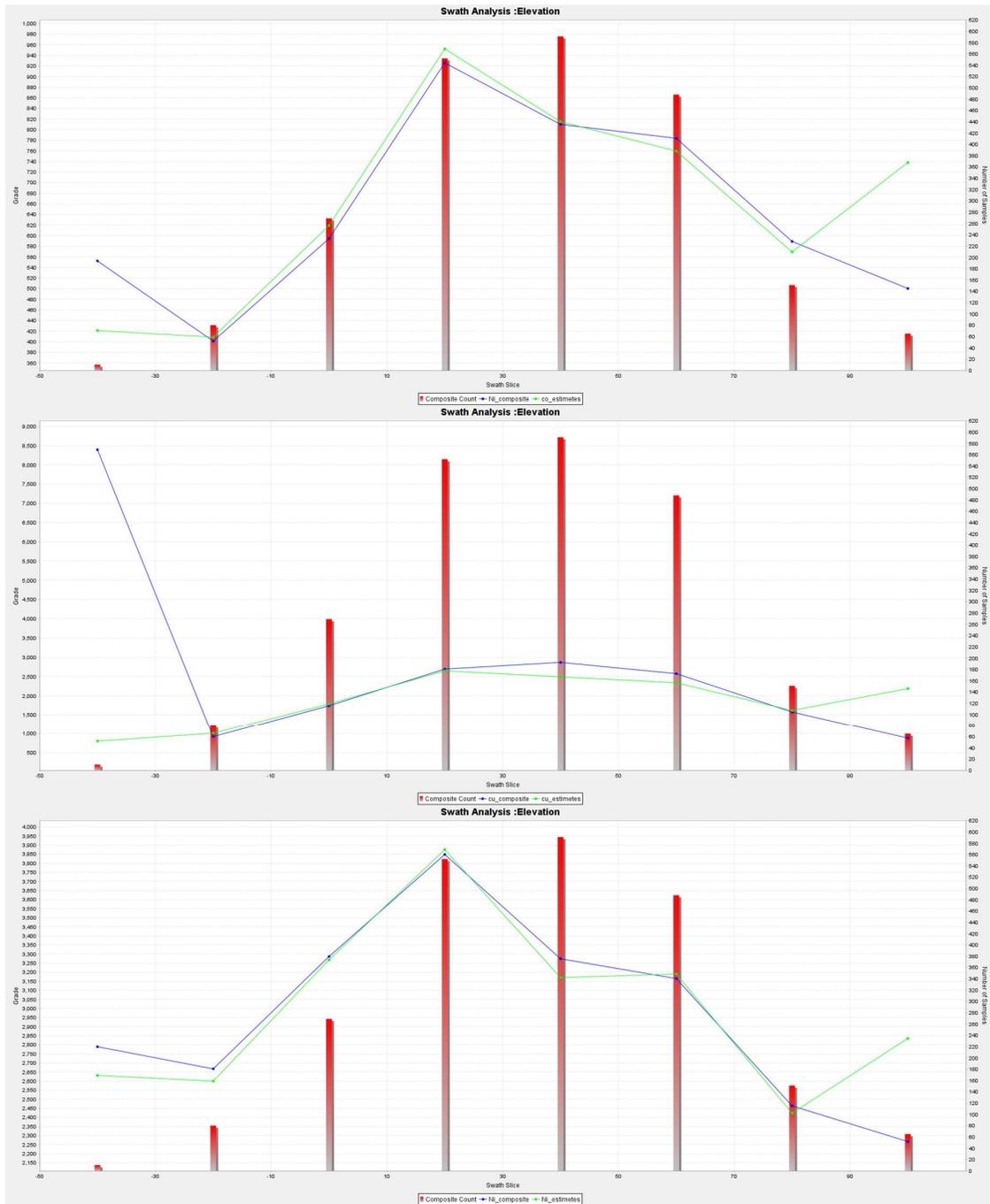


Figure 11-15 Swath plot analysis, Elevation. Blue= grade from the composite file, Green= grade from the block model

### 11.12 Sensitivity of Mineral Resources

The relationship between the NiEq cut-off grade and the resource tonnage is shown in Figure 11-16. The effects of selected cut-off grade on Measured and Indicated Mineral resources are shown in Table 11-14. In Table 11-14 the sensitivity of Inferred Mineral resources is shown against varying cut-off grades.

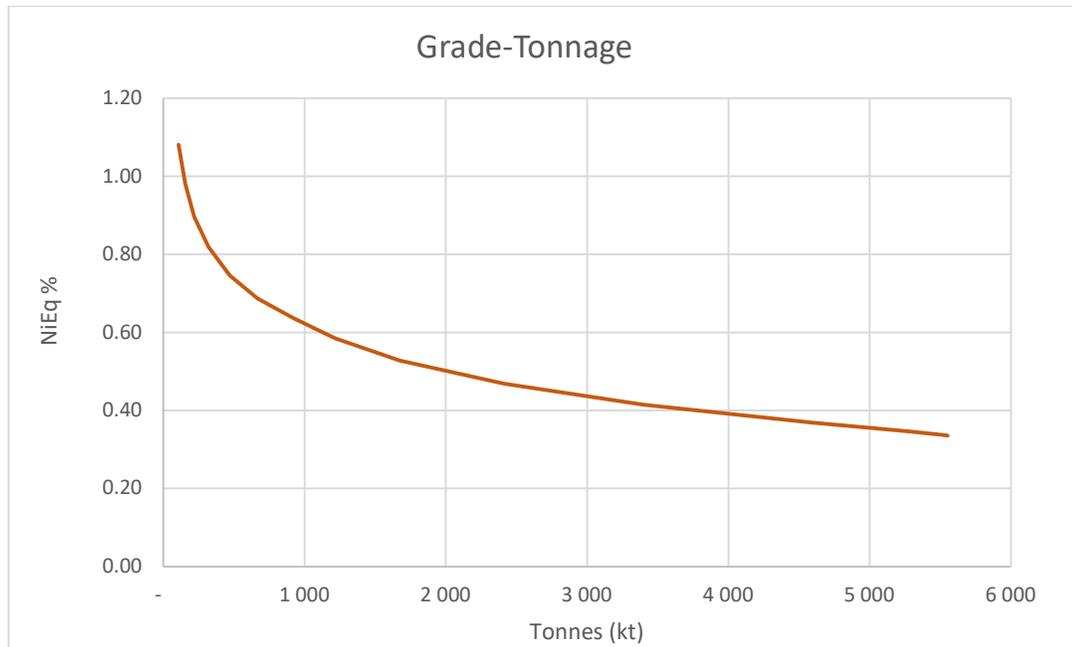


Figure 11-16 Hautalampi Grade-Tonnage curve for Measured & indicated resource class material

Table 11-14 Sensitivity of Measured + Indicated Mineral Resource to varying cut-off grades

Cut-off	Tonnes kt	Average grade			Contained Metal		
		Ni %	Cu %	Co %	Ni kt	Cu kt	Co kt
0.1	5 552	0.34	0.23	0.08	18.7	13.0	4.4
0.2	5 517	0.34	0.23	0.08	18.6	13.0	4.4
<b>0.3</b>	<b>5 281</b>	<b>0.35</b>	<b>0.24</b>	<b>0.08</b>	<b>18.3</b>	<b>12.8</b>	<b>4.3</b>
0.4	4 588	0.37	0.26	0.09	16.9	12.1	4.0
0.5	3 400	0.41	0.31	0.10	14.1	10.5	3.3
0.6	2 413	0.47	0.36	0.11	11.3	8.7	2.6
0.7	1 672	0.53	0.42	0.12	8.8	7.0	2.0
0.8	1 214	0.58	0.47	0.12	7.1	5.7	1.5
0.9	921	0.64	0.51	0.13	5.9	4.7	1.2

*Table 11-15 Sensitivity of Inferred Mineral Resource to varying cut-off grades*

Cut-off	Tonnes kt	Average grade			Contained Metal		
		Ni %	Cu %	Co %	Ni kt	Cu kt	Co kt
0.1	2 515	0.24	0.15	0.05	6.1	3.9	1.4
0.2	2 503	0.24	0.15	0.05	6.1	3.9	1.3
<b>0.3</b>	<b>2 378</b>	<b>0.25</b>	<b>0.16</b>	<b>0.06</b>	<b>5.9</b>	<b>3.8</b>	<b>1.3</b>
0.4	1 559	0.26	0.20	0.06	4.1	3.1	1.0
0.5	422	0.30	0.43	0.08	1.3	1.8	0.3
0.6	142	0.30	1.00	0.09	0.4	1.4	0.1
0.7	91	0.28	1.46	0.10	0.3	1.3	0.1
0.8	62	0.25	1.95	0.09	0.2	1.2	0.1
0.9	50	0.24	2.28	0.09	0.1	1.1	0.0

## 12 Interpretation and Conclusions

The following remarks and conclusions regarding the Hautalampi project are summarized below:

- The drilling and sampling to date support the mineral resources estimate and there is sufficient information to be used as a basis for the mineral resource estimate.
- The drilling pattern and spacing covers the known measured, indicated and inferred mineral resources. A limited amount of new drilling down-dip of the historic drilling could upgrade the indicated and inferred resources.
- The deposit geology and style of mineralization is well understood, and the property has a history of successful mining activities. However, the Mökkivaara area needs more consideration to upgrade the resource class.
- Based on the mineral resource estimate, the project is well suited to proceed to the next study phase.

## 13 References

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**Section 1 Sampling Techniques and Data**

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

Criteria	JORC Code explanation	Commentary															
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, 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 or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>All holes in the estimate were diamond drill holes.</li> <li>Diamond drill core was sampled based on sample intervals determined by trained geologists.</li> <li>The drill core was half-cut. Older Outokumpu era drill holes were also sent for analysis by interval selection.</li> <li>Sampling has been carried out under Outokumpu Oy, Finn Nickel Oy and FinnCobalt Oy geologists for the respective drilling campaigns. Sampling protocols and quality assurance/quality control (QAQC) procedures as per company standards relative to the company who made the drilling.</li> <li>Selected samples were crushed and pulverised and sent to analysis.</li> </ul>															
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether the core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>The following diamond drill hole campaigns have been made:</li> </ul> <table border="1"> <thead> <tr> <th>Campaign</th> <th>Company</th> <th>Sample size</th> </tr> </thead> <tbody> <tr> <td>HA</td> <td>2020, FinnCobalt Oy</td> <td>57.5 mm</td> </tr> <tr> <td>HL</td> <td>2007–2008, Finn Nickel Oy</td> <td>42 mm + 62mm</td> </tr> <tr> <td>OKU</td> <td>1950–1987, Outokumpu Oy Exploration and Keretti Mine</td> <td>22 mm</td> </tr> <tr> <td>k</td> <td>1950–1986, Outokumpu Keretti mine, underground drilling</td> <td>22 mm</td> </tr> </tbody> </table>	Campaign	Company	Sample size	HA	2020, FinnCobalt Oy	57.5 mm	HL	2007–2008, Finn Nickel Oy	42 mm + 62mm	OKU	1950–1987, Outokumpu Oy Exploration and Keretti Mine	22 mm	k	1950–1986, Outokumpu Keretti mine, underground drilling	22 mm
Campaign	Company	Sample size															
HA	2020, FinnCobalt Oy	57.5 mm															
HL	2007–2008, Finn Nickel Oy	42 mm + 62mm															
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k	1950–1986, Outokumpu Keretti mine, underground drilling	22 mm															

Criteria	JORC Code explanation	Commentary
<i>Drill sample recovery</i>	<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 core recovery was physically measured and recorded by the drillers for every core run. Any core loss was recorded on the drill core report by drillers.</li> <li>• Core recovery was double-checked and measured for all drill holes during geological logging procedure.</li> <li>• No additional measures were taken to maximise the core recovery.</li> <li>• The core recovery was generally very good. A sampling bias has not been determined.</li> </ul>
<i>Logging</i>	<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>• All drill core was geologically logged determining lithology and mineralogy. Rock quality designation (RQD), Q´values and core recovery were measured for all drill cores by the Finn Nickel and FinnCobalt geologists.</li> <li>• All Finn Nickel and FinnCobalt drill cores are photographed in wet and dry states after logging was completed and sample intervals had been marked on the core boxes.</li> <li>• A total of 2054 samples were measured for density.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise the representativity of samples.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Core was cut in half using a diamond saw with generally 1-3m half core samples submitted for analysis. Outokumpu era samples were assayed in the company laboratory.</li> <li>• Finn Nickel samples were crushed with more than 70% passing the &lt;6 mm, then reduced in a splitter to 150 g. The 150 g sample is pulverised with more than 85% passing &lt;75 microns.</li> <li>• FinnCobalt samples were crushed with more than 70% passing the &lt;2 mm, then reduced in a splitter to 250 g. The 250 g sample is pulverised with more than 85% passing &lt;75 microns.</li> <li>• Finn Nickel and FinnCobalt samples were prepared by ALS as per industry best practice. Outokumpu’s (largen exploration and mining company at the time) work was carried out for their internal use, it is believed that the</li> </ul>

Criteria	JORC Code explanation	Commentary
		work was carried out to industry standards and Outokumpu exploration practices for that time.
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Finn Nickel samples were analysed using Labtium Oy methods: 510P,521U, 703P/704P. Also, Finn Nickel's laboratory was used utilizing the AAS method and S-analyser.</li> <li>FinnCobalt samples were analysed at ALS Laboratory in Ireland using methods: ME-ICP61, S-IR08, ME-ICPORE, AAORE, Ni-ICP05 and Au-AA23.</li> <li>QAQC:</li> <li>Finn Nickel samples: every batch of 50 samples contained 2 standards, 1 blank and 3 laboratory duplicates.</li> <li>FinnCobalt: CRM, Blanks and core duplicates added to sample batches (ca. 15% of analysed samples were QAQC samples).</li> </ul>
<p><i>Verification of sampling and assaying</i></p>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>FinnCobalt has carried out two reassay campaigns for the old Outokumpu samples. All information has been internally audited by various consulting groups.</li> <li>Twining of holes was not carried out.</li> <li>All present-day field data is captured electronically and subsequently validated as it is imported into the centralised Access database.</li> <li>Electronic copies of logs, survey and sampling data are stored in the cloud data server.</li> <li>No adjustments have been made to any assay data in this report.</li> </ul>
<p><i>Location of data points</i></p>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>FinnCobalt drill locations were measured with a differential GPS, drill hole surveys were made with the Devico Deviflex instrument.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Finn Nickel drill locations were measured with a differential GPS but no 3d surveying of the holes was made.</li> <li>• The grid system used is Finnish KKJ Grid Zone 4.</li> <li>• The topographic data used for the drill sections has been gridded from elevation data acquired from the National Land Survey of Finland.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>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.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill data is at sufficient spacing to define Measured, Indicated and Inferred Mineral Resource.</li> <li>• Compositing to 1.5 m has been applied before resource estimation.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Drill holes have been drilled perpendicular to the interpreted strike of the mineralisation and lithology.</li> <li>• No sampling bias as a consequence of orientation-based sampling has been identified.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The sample “chain of custody” is managed by FinnCobalt Oy’s geological personnel.</li> <li>• Drill cores are stored in a locked facility in Outokumpu and GTK’s Loppi core archive.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Internal company auditing and a review by AFRY Finland Oy during the resource work in May-June 2021 found that FinnCobalt Oy’s data collection and QA/QC procedures were conducted to industry standards.</li> </ul>

## 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	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The property is covered by FinnCoblt mining concession 7802/1. The total area of the mining concession is 283.5 hectares.</li> <li>The mining concession is valid.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgement and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The earliest drillings in the Co-Ni enriched zone nearby the Keretti Cu ore were made by Outokumpu Oy already in the 1930s. Outokumpu continued the exploration between 1950 to 1987. FinnNickel drilled the property between 2007-2008.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Hautalampi is a hanging-wall Co-Ni-Cu mineralised body 150 to 200 metres vertically above the historic Keretti mine. VMS type deposit. The deposit is located in the quartz rock-skarn zone between serpentinite and mica schist, above the Keretti copper ore. The rock is banded and occasionally also slaty. Banding is attributed to the variation in grain size, in the abundance of Ca-Mg minerals, in dust-like sulphides and microcrystalline graphite and chromite.</li> </ul>
Drill hole Information	<ul style="list-style-type: none"> <li>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: <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>downhole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does</li> </ul>	<ul style="list-style-type: none"> <li>Not relevant. Exploration results are not being reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></p>	
<p><i>Data aggregation methods</i></p>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not relevant. Exploration results are not being reported.</li> </ul>
<p><i>Relationship between mineralisation widths and intercept lengths</i></p>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not relevant. Exploration results are not being reported.</li> </ul>
<p><i>Diagrams</i></p>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A relevant plan showing the drilling is included within this report.</li> </ul>
<p><i>Balanced reporting</i></p>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not relevant. Exploration results are not being reported.</li> </ul>
<p><i>Other substantive exploration data</i></p>	<ul style="list-style-type: none"> <li>• <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,</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not relevant. Exploration results are not being reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></p>	
<p><i>Further work</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Further diamond drilling to test for further extensions and to increase confidence.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling data is electronically stored in an Access database, that is managed by FinnCobalt Oy.</li> <li>Validation of the data import include checks for overlapping intervals, missing survey data, missing assay data, missing lithological data, and missing collars.</li> </ul>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Mr Seppä visited the site on March 10th, 2021. The inspection included: <ul style="list-style-type: none"> <li>Visiting the historic Keretti mine area.</li> <li>Visiting the drill core storage.</li> <li>Overall view of the property.</li> <li>Inspection of available drill holes.</li> </ul> </li> <li>Discussions with Markus Ekberg, CEO of FinnCobalt Oy and geologists Kalle Penttilä and Matthias Mueller of FinnCobalt.</li> </ul>
Geological interpretation	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>The modelling of mineralised solids was done by modelling solids with NiEq % cut-off of 0.3%. The mineralised areas are identified and there is a clear orientation of grade continuity present. The resource solids</li> <li>Drillhole intercept logging and sample analysis results have formed the basis of the geological and mineralisation interpretations.</li> <li>The extents of the modelled mineralisation zones are constrained by available drill data. Alternative interpretations are not expected to have a significant influence on the global Mineral Resource estimate.</li> <li>The continuity of the geology and mineralisation can be identified and traced between drill holes by visual and assay characteristics. The geology and mineral</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>distribution of the system appear to be reasonably consistent. Confidence in the grade and geological continuity is reflected in the Mineral Resource classification.</p>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>The lower edge of the Co-Ni-Cu-mineralisation zone is typically some 150 to 200 m above and a bit to the NW of the upper edge of the main Keretti Cu-ore.</li> <li>Hautalampi mineralised zone is approximately 1000 m in length, 100-150 m in width and 1-30 m in thickness. Some drill holes indicate that in the NW parts the mineralisation is cut by the present erosion surface. Mineralisation has a 10 - 55° dip to the SE (in average about 25-30°)</li> <li>Mökkivaara mineralisation is located approximately 650 meters northeast of the Hautalampi mineralisation and it has the same overall strike and dip as the Hautalampi mineralisation.</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer-assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Ordinary Kriging method ("OK") algorithm for grade interpolation was used for the Hautalampi Mineral Resource using experimental variogram models created for the elements Ni, Cu, Co, S, Fe and Zn. Mökkivaara Mineral Resource estimation was carried out using the Inverse Distance Squared method ("ID2") algorithm using a search ellipsoid oriented to the average strike, plunge and dip of the mineralized zone.</li> <li>Surpac software was used for the estimation.</li> <li>The estimate is based on a block size of 5 m (X) by 5 m (Y) by 5m (Z), with sub-blocks of 2.5m by 2.5m by 2.5m. The block model is rotated -45 degrees around Z-axis to match the general strike of the mineralization. A bulk density value of 2.82t/m<sup>3</sup> was assigned to all materials.</li> <li>No grade cuts were applied to the estimate.</li> <li>Selective mining units were not modelled in the Mineral Resource model.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>For validation, a quantitative spatial comparison of block grades to assay grades was carried out using swath plots.</li> <li>Global comparisons of drill hole composites and block model grades with different modelling methods (nearest neighbour and inverse distance) were also carried out.</li> <li>The estimation was constrained by interpreted resource solids.</li> </ul>
Moisture	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Tonnages have been estimated on a dry in situ basis.</li> </ul>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>The cut-off value for NiEq was estimated by using a NiEq value calculation.</li> <li>NiEq was then compared against the assumed operating cost (OPEX) to see the break-even cut-off.</li> <li>0.3% NiEq was selected to be appropriate modelling and reporting cut-off.</li> </ul>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>It has been assumed that these deposits are amenable to underground mining methods and are economic to exploit to the extent currently modelled. No assumptions regarding minimum mining widths and dilution have been made.</li> </ul>
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported</li> </ul>	<ul style="list-style-type: none"> <li>Bench and pilot test work on Hautalampi ore has been carried out at the Geological Survey of Finland (GTK) Mintec plant. <ul style="list-style-type: none"> <li>Laboratory flotation and mini-pilot tests were conducted in 2007. Cu grade and recovery of Cu concentrate were 24.4% and 76.1%. Ni/Co concentrate Ni grade and recovery were 10.0%</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>with an explanation of the basis of the metallurgical assumptions made.</i></p>	<p>and 40.9%. Ni/Co concentrate Co grade and recovery were 3.8% and 42.4%. Feed grades in test were 0.76% Cu, 0.31% Ni and 0.11% Co.</p> <ul style="list-style-type: none"> <li>○ Laboratory and mini-pilot test work was conducted again in 2009. In laboratory test work Cu grade and recovery of Cu concentrate were at best 31.2% and 76.4%. In the same test, Ni/Co concentrate Ni grade and recovery were 14.2% and 54.1%. Ni/Co concentrate Co grade and recovery were 4.1% and 56.%. Feed grades in test were 0.676% Cu, 0.311% Ni and 0.09% Co. Recoveries in the mini-pilot were generally at a lower level, but ore had been oxidized which was found as the likely reason for lower recoveries. Based on the results GTK estimated a 25% Cu grade with an 85% Cu recovery for the full-scale production. For Ni/Co concentrate Ni grade and recovery in full scale were estimated to be 6.0% and 80%.</li> <li>○ Bench-scale test work was done in early 2019 where the average grades in the ore were 0.37% of copper, 0.47% of nickel and 0.14% of cobalt. The test was done as an open circuit test. The average copper grade in copper concentrate was 26.2% with 78.8% Recovery. Average Ni and Co grades and recoveries in Ni/Co concentrate were 7.7% Ni grade / 64 % Ni recovery and 1.8 % Co grade / 62 % Co recovery.</li> <li>○ Continuously operated flotation pilot had copper recovery of 86,5% nickel recovery of 82.0% and cobalt recovery 82,6% as it highest. The copper concentrate grade was 26.7% Cu. Ni and Co grades in Ni/Co concentrates were 8.0% and 1.9%. The feed rate was between 30-35 kg/h. Test was done during late Autumn 2019. The average grades in the ore were 0.362% of copper, 0.426% of nickel and 0.112% of cobalt.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>○ Historically similar kinds of processing studies have been conducted in the 1980s by Outokumpu and VTT.</li> </ul> <p>Leaching Test Work:</p> <ul style="list-style-type: none"> <li>• The performance of FinnCobalt nickel-cobalt concentrate leach extractions, PLS purification efficiency and purity of the final products were tested in 2019 by Outotec. Test work was conducted for two process concepts: 1) production of nickel and cobalt sulphate solution and 2) production of mixed hydroxide precipitate (MHP). Lab-scale batch test work was used in all tests.               <ul style="list-style-type: none"> <li>○ In atmospheric leaching 89% nickel and 85% cobalt extraction were achieved by using 72 h leaching time, 70 g/L sulfuric acid concentration a particle size d80 &lt; 20 µm of concentrate.</li> <li>○ With pressure oxidation at 220 degrees and O2 partial pressure of 7 bars, 98.7% nickel and 99.7% cobalt extraction were achieved.</li> <li>○ Iron and other impurities were removed efficiently from the PLS with jarosite precipitation, sulphide precipitation and SX process.</li> <li>○ Test results indicate that it was possible to produce pure battery-grade nickel and cobalt sulphate solutions or MHP products. Ni/Co sulphate was produced to the sulphate solution. In MHP precipitation 95.6 % Ni recovery and 97.4 % Co recovery from solution were achieved in pH 7.5.</li> </ul> </li> </ul>
<p><i>Environmental factors or assumptions</i></p>	<ul style="list-style-type: none"> <li>• <i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a</i></li> </ul>	<ul style="list-style-type: none"> <li>• A clear permitting process exists in Finland.</li> <li>• The deposit has an Environmental Permit for underground mining in force and Mining Lease appropriation is ongoing.</li> <li>• Autumn 2020 the company decided to commence a new Environmental Impact Assessment for the project</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></p>	<p>including underground mining and on-site ore processing and battery chemicals production plant.</p>
<p><i>Bulk density</i></p>	<ul style="list-style-type: none"> <li>• <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li>• <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Bulk density was estimated based on available density measurements.</li> <li>• A total of 2054 samples were available and from those 478 were inside modelled resource solids. 1067 samples were outside of resource solids and were taken from samples below the selected modelling cut-off of 0.3 % NiEq.</li> <li>• The average density was calculated for waste rock and for mineralised material. As a result, a density of 2.82 was used for both waste and mineralised material.</li> </ul>
<p><i>Classification</i></p>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resource was classified in accordance with the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC, 2012).</li> <li>• Classification of the Mineral Resource has accounted for the level of geological understanding of the deposit, quantity, quality and reliability of sampling data, assumptions of continuity and drill hole spacing.</li> <li>• The Mineral Resource is classified as an Indicated Mineral Resource for those volumes wherein the Competent Person's opinion there is adequately detailed and reliable, geological, and sampling evidence, which are sufficient to assume geological and mineralisation continuity.</li> <li>• The Mineral Resource is classified as an Inferred Mineral Resource where the model volumes are, in the Competent Person's opinion, considered to have more limited geological and sampling evidence, which are sufficient to</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>imply but not verify geological and mineralisation continuity.</p> <ul style="list-style-type: none"> <li>The volumes located outside the mining concession was not classified.</li> <li>The Mineral Resource estimate appropriately reflects the view of the Competent Person.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>Internal audits and peer review were completed by AFRY Finland Oy which verified and considered the technical inputs, methodology, parameters and results of the estimate.</li> <li>No external audits have been undertaken.</li> </ul>
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>The estimate utilised good estimation practices, good quality drilling, sampling and assay data. The extent and dimensions of the mineralisation are sufficiently defined by the detailed drilling. The deposit is considered to have been estimated with a good level of accuracy.</li> <li>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource as per the guidelines of the JORC Code (2012 Edition).</li> <li>The Mineral Resource statement relates to global estimates of in situ tonnes and grade.</li> <li>No mining has taken place at this deposit to allow reconciliation with production data.</li> </ul>