

FINNCOBALT

Hautalampi Cobalt-Nickel-Copper Mine Project

Revitalisation of the Outokumpu Mining Camp

Aiming to produce Traceable and Responsible
battery-grade Co-and Ni-chemicals

Vulcan Hautalampi Oy



Disclaimer

Statements in this presentation which are not purely historical facts, including without limitation statements regarding future estimates, plans, objectives, assumptions or expectations of future performance are "forward-looking statements". We caution you that such "forward-looking statements" involve known and unknown risks and uncertainties that could cause actual results and future events to differ materially from those anticipated in such statements.

Such risks and uncertainties include fluctuations in metal prices, unpredictable results of exploration activities, uncertainties inherent in the estimation of mineral reserves and resources, fluctuations in the costs of goods and services, problems associated with exploration and mining operations, changes in legal, social or political conditions in Finland, and lack of appropriate funding, all of which could, among other things, prevent any of the forward-looking statements in this news release from coming to fruition or lead to a delay in the commencement of mining operations.

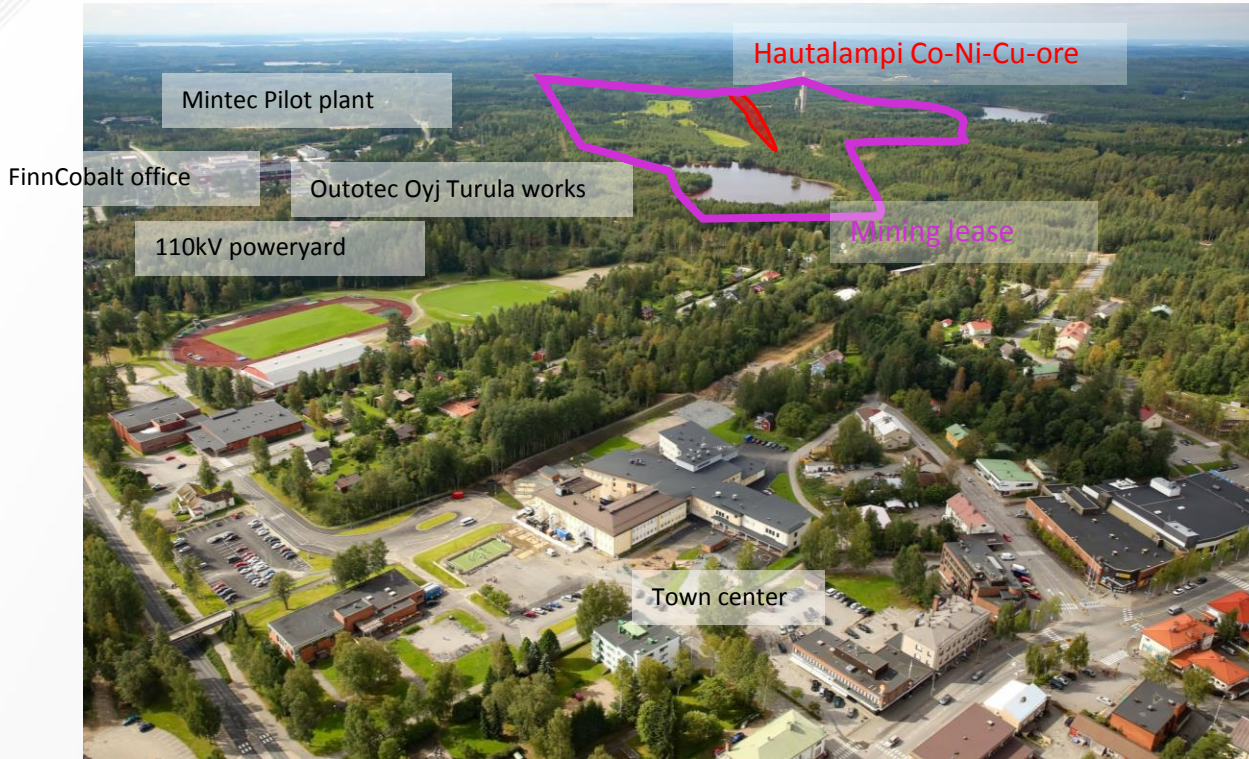
This statement is prepared by Mr. Markus Ekberg (Eurogeologist), a person qualified under the terms of Canadian National Instrument 43-101.

Business Idea

- Develop and mine Hautalampi Co-Ni-Cu-mine
- Benefit from previous investments for the project – sunk cost 10+ M€
- Produce and upgrade Co-Ni-concentrate to technical or battery-grade sulphate chemicals by tank leaching
- Produce conventional Cu-concentrate for smelting



Outokumpu town and Hautalampi ore



Robust Economics with chemicals production

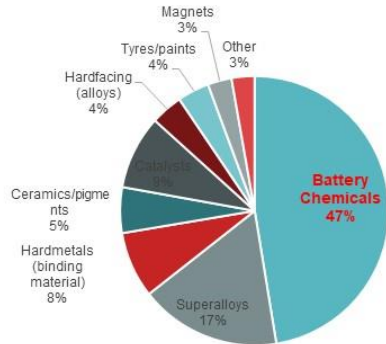
- Planning prices: Co 27.5 USD/lb, Ni 16 000 USD/t, Cu 6200 USD/t
Au 1100 USD/oz , Ag 18 USD/oz, Euro/USD=1.17
- CAPEX 60M€
- OPEX 20M€/a
- Sales 40+ M€/a
- Operating margin 20 M€/a
- NPV@ 5% 55 M€ (or 85M€ with increased reserves)
- IRR 31 % (or 37% with increased reserve)

- All figures preliminary with 7 year project life
- Potential for much longer lifetime with additional reserves and remnant pillar mining from the Outokumpu copper mine
- 150 employees

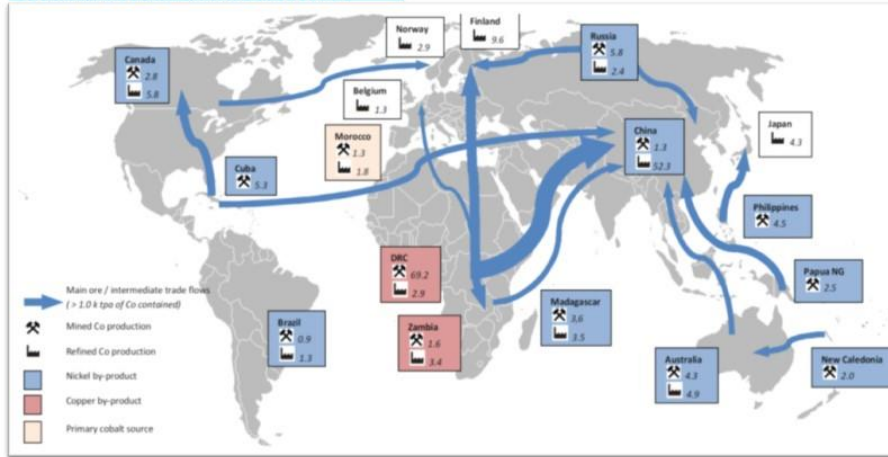


Cobalt Cathode

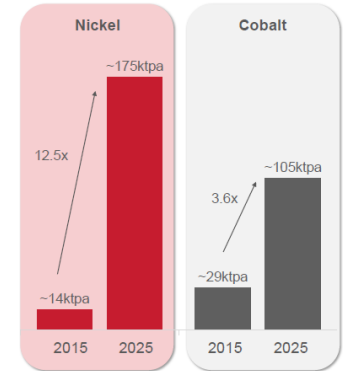
Demand For Cobalt By Application



Cobalt Mined And Refined Production



Implied Contained Metal Demand



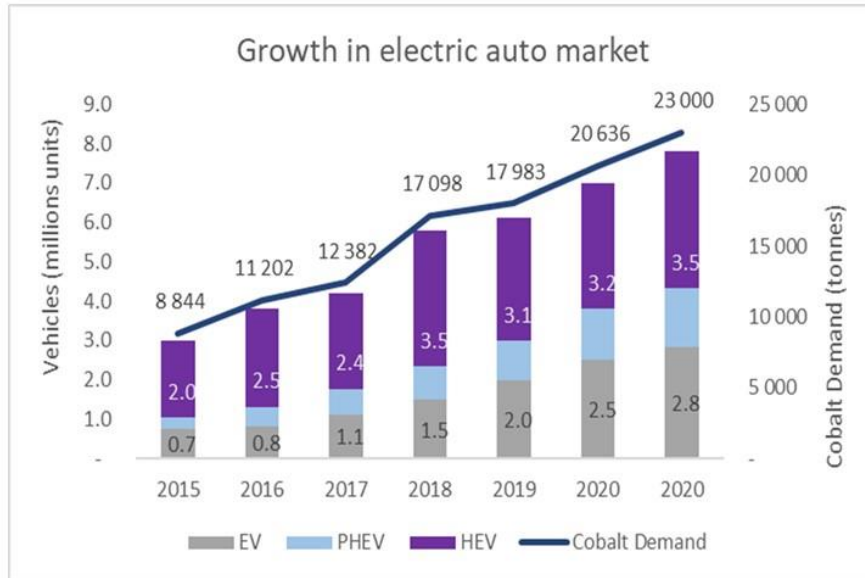
see based on internal company estimates, utilizing an EV

CORE CONSULTANTS | 2017



- Battery demand has become the single biggest use for cobalt. The limiting factor with cobalt is that it is produced as a by-product of either nickel or copper and there are no significant production hubs outside of the DRC.
- Cobalt is vulnerable to supply insecurity. This was seen in 2008 when cobalt prices increased from \$11/lb to 52/lb on the back of country instability.

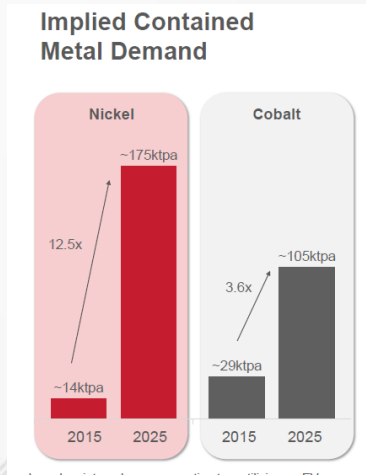
Cobalt Cathode



- There is a lack of significant alternatives to DRC sources of cobalt
- Calls from battery manufacturers to increase supply of cobalt has fallen on deaf ears
- Skepticism among producers as to the potential for cobalt cathodes is deep rooted.

Nickel is a key ingredient in lithium-ion batteries (~50kg Ni per car)

- Growing emerging market:
 - Nickel is increasingly being included in battery formulations as it leads to higher energy density batteries
- Nickel demand for batteries is expected to grow at faster pace than seen historically – from ~50kt in 2015 to 150-200 kt by 2025



Hautalampi History, 1900's

- Hautalampi Co-Ni-Cu deposit is located in the old Outokumpu Mining Camp area. The famous Outokumpu copper ore produced 28.3 Mtonnes @ 3.8% Cu.
- Hautalampi deposit is located parallel to the Cu-ore and is vertically about 150–200 m above the Copper Ore
- During 1985-1986 Outokumpu Oy performed exploration and mine development works at Hautalampi deposit
- Works included core drilling 10,000 m, decline was pushed down to 150 metres (advance 1200 m) and ore access drifts 850 m were done. First stope was opened and opening blast made. Further 10,000 m core drilling was done 2008-2009 by FinnNickel
- The sudden fall of Ni and Co prices and closure of Kokkola Cobalt roaster put the Hautalampi Mine project on halt year 1986



History, 2000's

- FinnNickel Oy purchased year 2007 the ground, mining rights and mining lease from Outokumpu Mining Oy
- FinnNickel Oy drilled 92 DDH's, totally 10.1 km during 2007-2008
- Feasibility Study completed 2009:
 - Planned mining rate 350,000 t/a
 - Processing at Luikonlahti processing plant
- Mineral Resource Estimate was prepared year 2009 according to the Canadian NI 43-101-code:

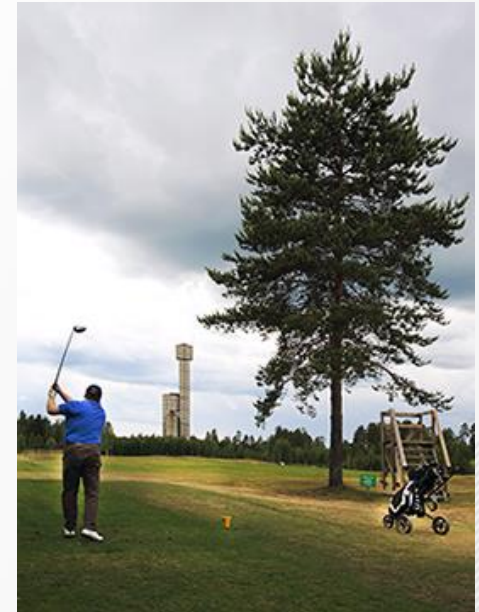
	tonnes	Ni%	Cu%	Co%
Proven	1,030,000	0.45	0.42	0.15
Possible	1,216,000	0.42	0.30	0.11
Inferred	850,000	0.4	0.3	0.1

- Vulcan Resources Pty Ltd purchased mineral rights and the ground together with the Luikonlahti plant from the FinnNickel bankruptcy estate

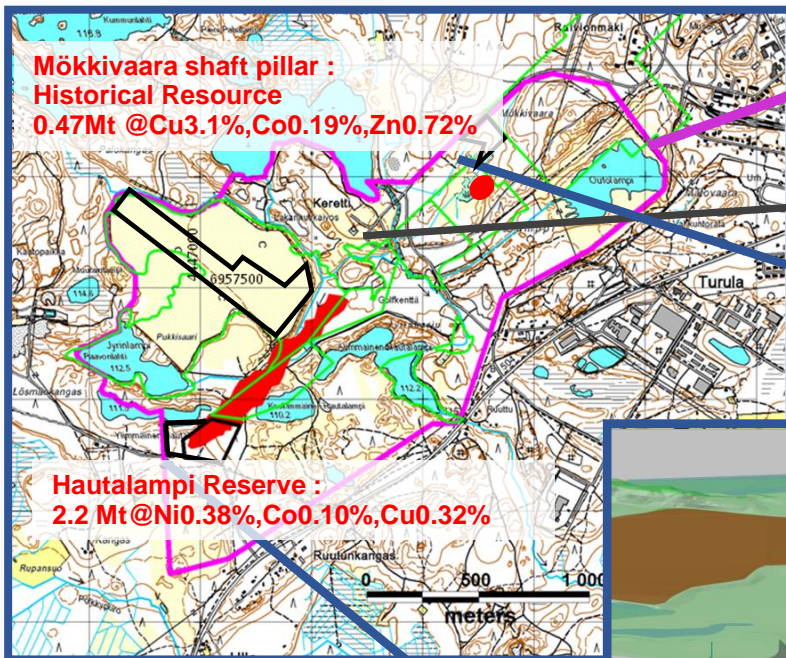


Current situation

- Vulcan Resources Pty Ltd (Perth, Australia) has withdrawn from Finland and sold Luikonlahti plant and Kylylahti Mine to Boliden
- The remaining asset Hautalampi Mine (via Vulcan Hautalampi Oy) was sold to Alandra Oy and Kiviralli Oy in September 2016. Tetra Ekberg Oy joined the company as the third owner in June 2017
- The deal was the purchase of 100% of shares of Vulcan Hautalampi Oy
- Vulcan Hautalampi Oy owns all mining rights (100%) of the Hautalampi CoNiCu-deposit and 280 hectares of the ground (~94% of the mining lease area). The Outokumpu Golf course is also owned by VHOy
- The deal was “clean” - there are no royalties or redemption rights for the previous owners



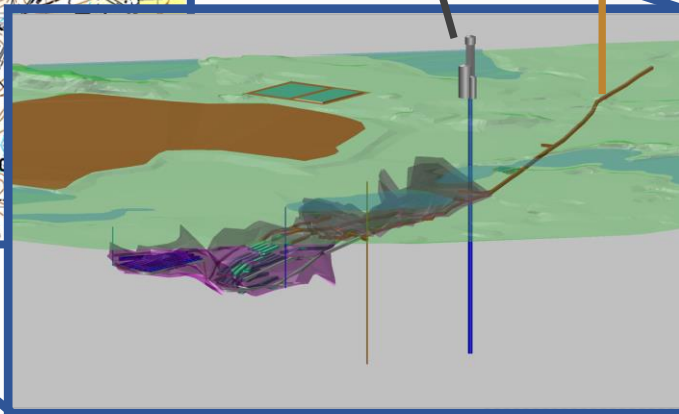
Hautalampi Mine area

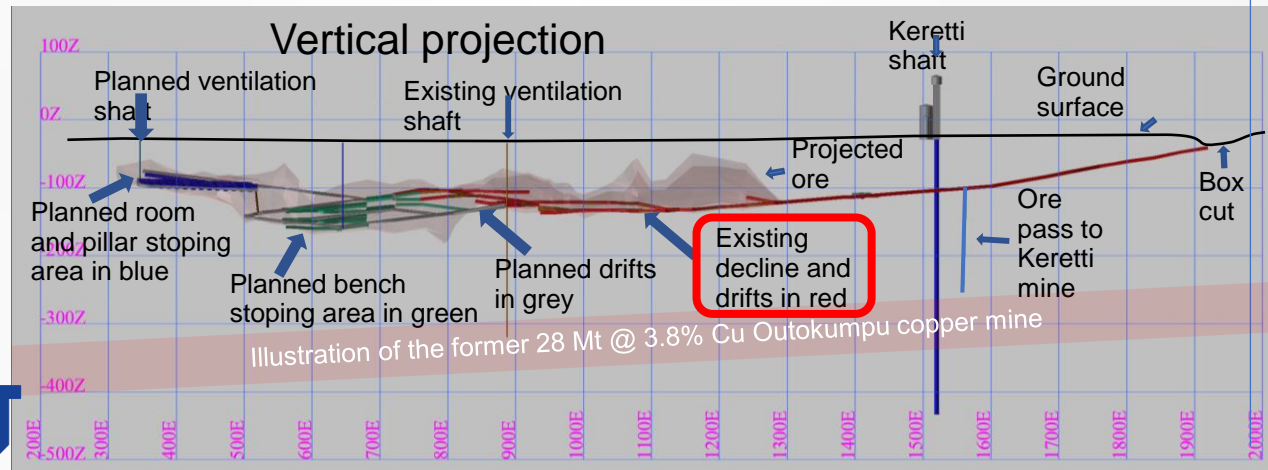
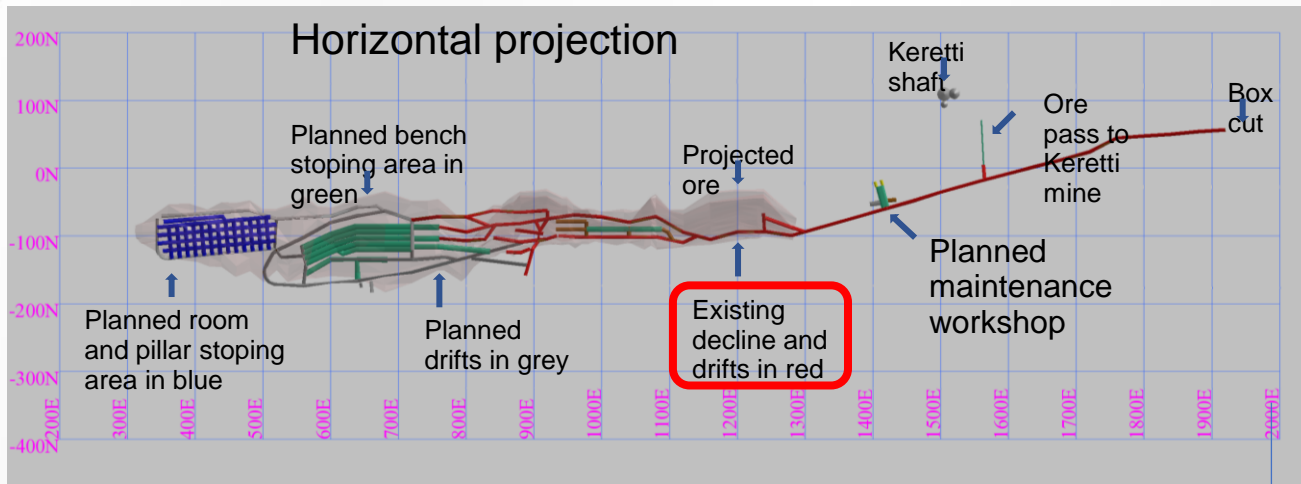


Mining lease area
280 ha

Keretti shaft
and tower

Existing
decline





Permits and Mining Concession

- Environmental and Water discharge permit for the underground mine was granted 6th July 2009 and became legal 27th May 2011 after the appeal procedure
- The permit is valid and in force and will allow mining operations to commence immediately
- Mining Concession was granted 26th November 2013, total area 283.5 hectares by modifying and expanding the old Outokumpu Mine Mining Concession
- Hautalampi Mine opening works are estimated to take about 12 months

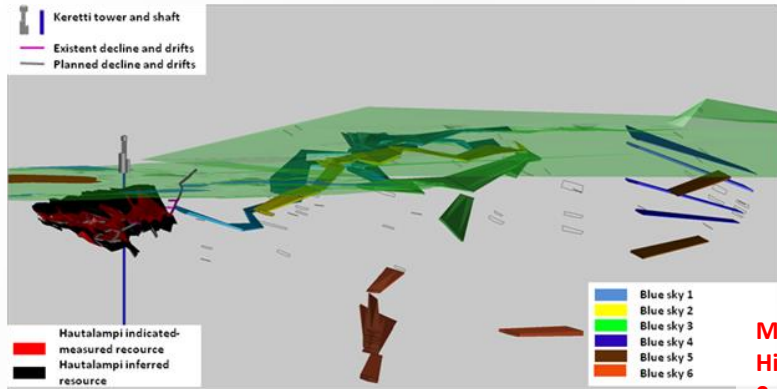
Processing options

- FinnCobalt does not have its own processing facilities
- Alternatives for ore processing are:
 - Boliden Kylylahti Copper Oy: **Luikonlahti Mill**; Negotiations initiated. Options are toll processing or purchase of the plant. Trucking distance 45 km. Enough capacity, reserves will exhaust ____?
 - Mondo Minerals Finland Branch: **Vuonos Mill**; Talc-Nickel concentration plant, Mondo Minerals. Possible to construct a flotation plant. Trucking distance 8 km.
 - **New processing plant** next to the Hautalampi Mine. Existing tailings area can be used and tailings be used as the paste back fill in the underground mine.

Future Milestones

- 2017 organize all material
- Investor presentations and web sites
- First financing
 - 1 M€ secured for the minimum program
 - target additional 2-3 M€ for the resource upgrade drilling
- 2017 additional drill holes for metallurgical sampling
- 2018 metallurgical testwork for alternative processing options – chemicals production
- 2019 feasibility study update - OPEX / CAPEX
- 2018 Agreement of Processing option
- 2018 Offtake agreements of concentrates / chemicals
- 2018-19 Financing solutions for Mine Opening and possible partnerships
- 2019-20 Mine Opening Investment (5 -> 60 M€; own mining/contractor, toll processing or own plant, +/- chemical plant)
- 2020 Mine and concentrate production start-up

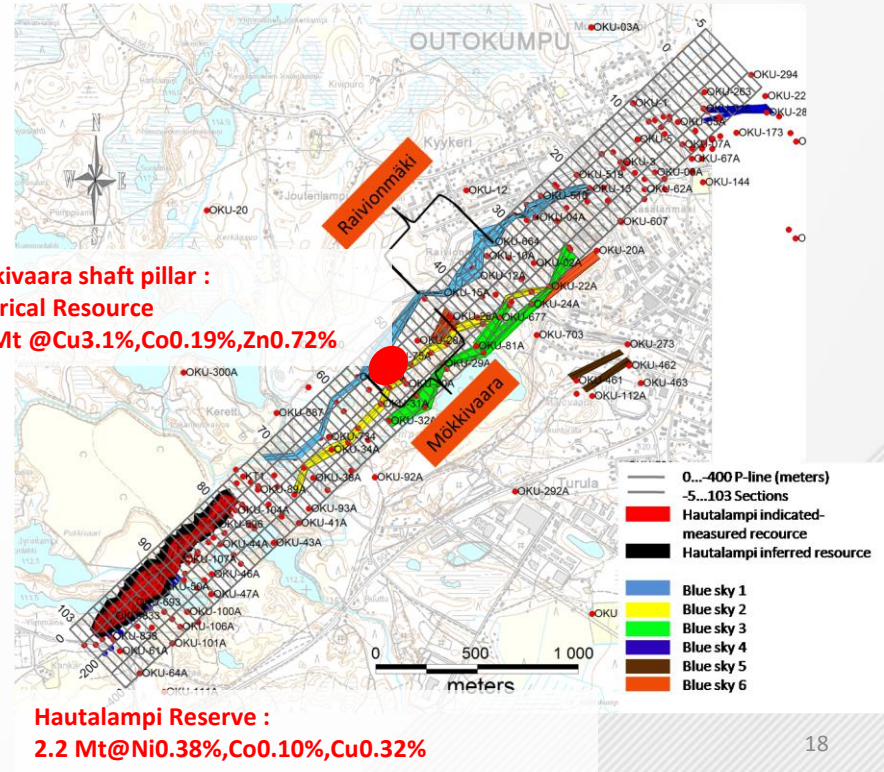
Blue Sky potential – based on historical drilling



Exploration potential in the mining lease area:

- Up to 5.4 Mt Co-Ni-Cu-ore – based on old core logs
- Remnants of the Outokumpu (Keretti) copper mine – shaft pillar in the high grade copper ore !!!

Mökkivaara shaft pillar :
Historical Resource
0.47Mt @Cu3.1%,Co0.19%,Zn0.72%



The board and management



- **Vesa-Jussi Penttilä (b. 1947), CEO**
 - **Founder and CEO since 2016.** MSc (Geology) Helsinki University 1975
 - **Principal Work Experience:** 45 years experience in the mining industry in Finland and Africa including General Manager positions at the Hitura Nickel Mine and Outokumpu Exploration. Nordic Exploration Award 2007.
 - **Holdings in company:** 33.3% via Alandra Oy
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- **Markus Ekberg (b. 1957), board member since June 2017**
 - **Previous positions include:** CEO of Endomines AB (listed NASDAQ OMX), Founder and ex-board member in Kodal Minerals PLC (AIM); board member and chairman in Finnish Mining Association; CEO and chairman of Tetra Minerals Oy; CEO and owner of Karelian Resource Service Oy
 - **Principal work experience:** 35 years experience in the international mining industry (gold, base metals, chrome, industrial minerals) in Finland, Norway, Ireland and Australia.
 - **M.Sc (Geology and Mineralogy), Turku University, Finland 1985.** Qualified Person (Australian JORC and Canadian NI-43-101 stock exchange codes), Eurogeologist, Kvalificerad Person (Svemin/FinnMin)
 - **Holdings in company:** 33.3% via Tetra Ekberg Oy
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- **Jarkko Ralli (b. 1941), Chairman of the Board since 2016**
 - 50 years mining contracting experience via own contracting companies Kiviralli Oy and Jarkko Ralli Oy in several Finnish mining operations
 - **Holdings in company:** 33.3% via KiviralliOy

Why FinnCobalt (aka Vulcan Hautalampi Oy) ?

- Excellent opportunity to participate in the cobalt price increase
- Fast track option to production:
 - Environmental permit and mining lease valid and in force
 - Ground (90%) and mining rights (100%) owned by the company
 - Canadian standard NI43-101 - resource and reserve defined
 - Previous mining camp with excellent infrastructure and workforce availability
 - Robust economic return with battery-grade chemicals production
- Upside potential from the increased resource/reserve basis and alternative processing options
- Experienced and committed local management and owner team
- Safe jurisdiction for all operations – Finland top scorer in the Fraser Mining study

=> Small, quick and easy - with an upside potential!

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