Likalampi

Alternative Names: Haarakumpu
Occurence type: occurrence

Commodity	Rank	Total measure	Total production	Total resource	Importance
gold	1	NA	NA	NA	NA
copper	2	NA	NA	NA	NA

Easting EUREF: 575830,89
Northing EUREF: 7368073,367
Easting YKJ: 3576034
Northing YKJ: 7371155

Discovery year: 1983
Discovered by: Outokumpu Oy
Province: Kuusamo-Kuolajärvi (Co, Au)
District: Kuusamo (Co, Au)
Comments: Discovered by Outokumpu: ground geophysical surveys, trenching and drilling into an airborne electromagnetic anomaly
References: 1, 7

Mineral deposit type

Group: Metallogenic deposit
Main type: Orogenic (metamorphic hydrothermal)
Sub type 1: Au-Co-Cu
Comments: The auriferous fluids were transported along deep, rift-tectonic faults up to the greenschist-metamorphic environment, concentrated on the antiform; the metals precipitated in structurally controlled sites close to impermeable dolerites and metavolcanic units or, rather, in the more competent sericite quartzite units between the more plastic mafic units or, rather, in the more competent sericite quartzite units between the more plastic mafic units.
References: 1, 2, 3, 5, 8, 9

Dimension

Expression: exposed
Form: discordant
Shape: NA
Length (m): 1300
Width (m): NA
Thickness (m): 30
Depth (m): NA
Area (ha): NA
Dip azim: NA
Dip: NA
Plunge azim: NA
Plunge dip: NA
Orientation method: NA
Dimension comments: The mineralised area is >1300 m long, 5-30 m wide

Holder history

Current holder: Latitude 66 Cobalt Oy
Years: 2018

Holding type: Application for exploration permit

Previous holders:

Company	Years	Holding type	Comments
Belvedere Resources Ltd	2012-2018	Reservation	appl. for exploration permit
Belvedere Resources Ltd	2006-2011	Claim (old law)	NA
Outokumpu Oy	1984-1986	Claim (old law)	NA

EXPLORATION ACTIVITY

Latitude 66 Cobalt Oy

Years	Activity type	Geologist	Exploration result	Ref
2021	detailed geophysics	Aaron Davies	NA	
	Heliborne aeromagnetic and electromagnetic survey			

Belvedere Resources Finland Oy

Years	Activity type	Geologist	Exploration result	Ref
2006-2011	NA	NA	NA	
	No exploration works were done			

Geological Survey of Finland

Years	Activity type	Geologist	Exploration result	Ref
1988-1988	regional geochemistry	NA	geochemical anomaly	
	Country-wide till-geochemical survey			

1984-1984	regional geophysics	NA	key geological features	
	Low-altitude airborne magnetic, electromagnetic and radiometric survey			

Outokumpu Oy

Years	Activity type	Geologist	Exploration result	Ref
1983-1983	core drilling	Osmo Inkinen	mineralized zone identified	1
	Core drilling (reconnaissance drilling): 2 diamond-drill holes, total 244.6 m. Average contents: 0.5-1 ppm Au, 0.4-0.7 % ppm Cu.			

1982-1985	detailed geology	Osmo Inkinen	key geological features	1

1982-1985	excavation	Osmo Inkinen	mineralized zone identified	1
	Five trences across the potentially mineralised area. Up to 2.3 ppm Au and 0.44 % Cu in channel samples; Co not analysed(?)			

1982-1985	detailed geophysics	Osmo Inkinen	geophysical anomaly	1
	MAgnetometric and slingram syrvey for an area of 0.55 km2			

GEOLOGY

Host rock: Sericite quartzite

Sericite quartzite (Host rock)

Rock type: Host rock
Proportion: present
Grain size: NA
Color: NA
References: 1, 2, 3, 4, 5, 6, 8
Comments: The mineralisation is in the Sericite Quartzite Formation(?) of the Kuusamo Schist Belt which is an intracratonic, failed rift filled by a subaerial to shallow-water volcanosedimentary.

Ore minerals:

Mineral	Proportion	Mineral texture
Chalcopyrite	minor	
Gold	minor	
Pyrrhotite	major	

Other minerals:

Mineral	Proportion	Mineral texture
Actinolite	present	Alteration product
Albite	present	Alteration product
Biotite	present	Alteration product
Chlorite	present	Alteration product
Chloritoid	present	Alteration product
K-Feldspar	present	Alteration product
Magnetite	present	Alteration product
Pyrite	present	Alteration product
Quartz	present	Alteration product
Sericite	present	Alteration product
Talc	present	Alteration product
Tremolite	present	Alteration product

Alteration:	Distribution:	Degree:	Relation to mineralization:
silicification	NA	NA	Post
albitic alteration	NA	Strong	Pre
Comments: Locally intense Albitization of clastic sediments and spilitisation of volcanic units when the 2.206 Ga mafic sills and dykes heated the evaporite-bearing sequence and put hot brines into circulation.			
biotite alteration	NA	NA	Syn
sulphidation	NA	NA	Syn
carbonate alteration	NA	NA	Syn
sericitic alteration	NA	NA	Syn
chloritic alteration	NA	NA	Syn

Metamorphic description:

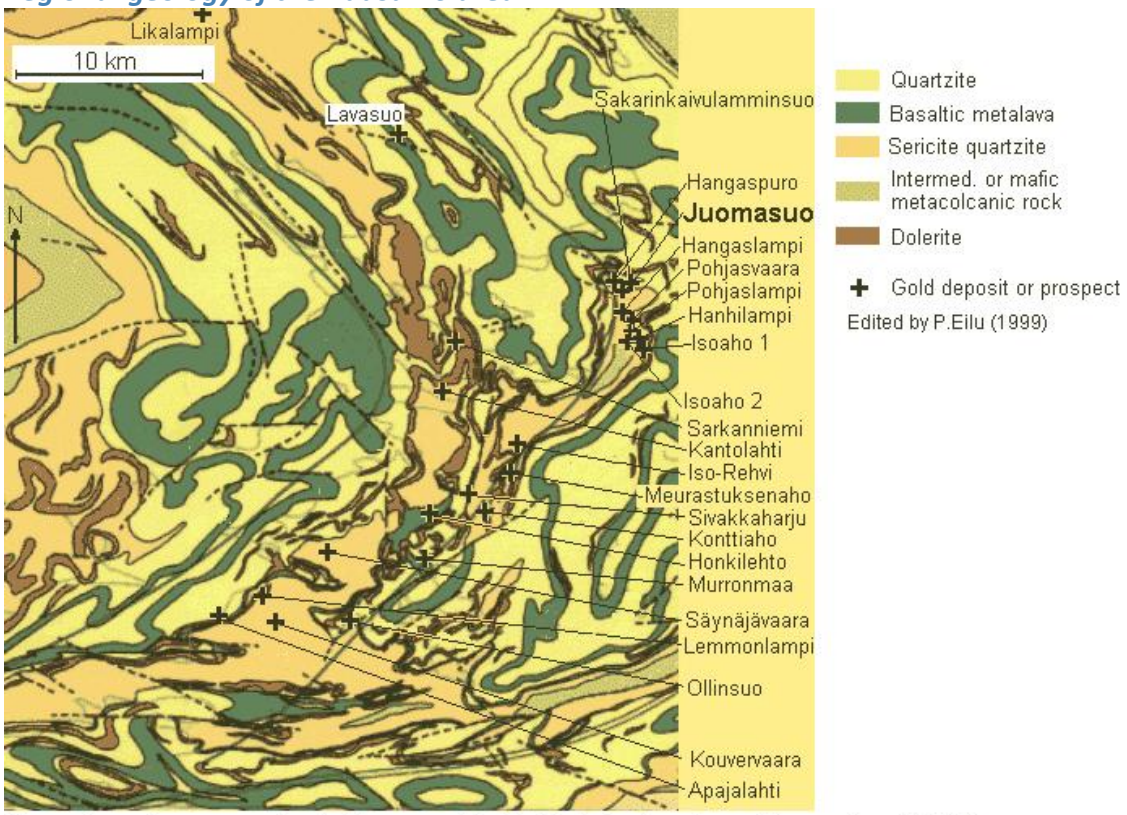
Type:	Facies:	Degree:	Relation to mineralization:	Min P- Max P (kbar)	MIn T- Max T (°C)
Regional	amphibolite metamorphic facies	medium metamorphic grade	NA		

Geological age:

Geological era:	Max age - Minage (Ma):	Inferred age (Ma):	Age of mineralization:
Paleoproterozoic (2500-1600 Ma)	1800-2070		Y
Comments: Mineralisation between 2.07-1.8 Ga.			

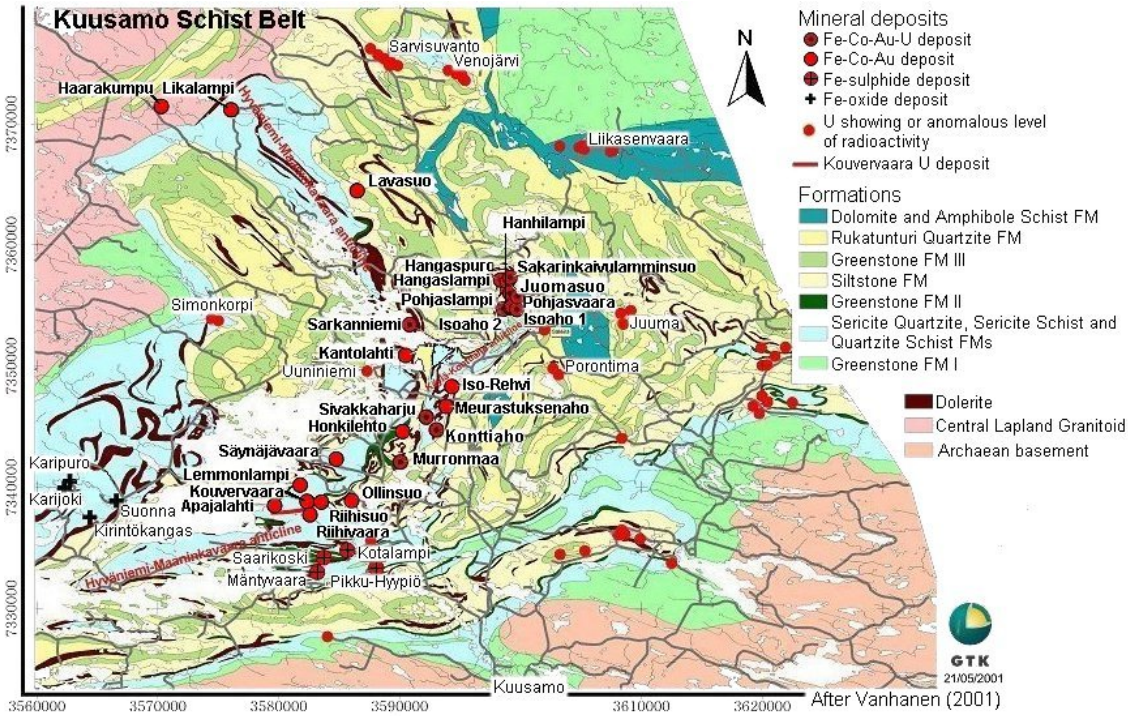
Figures

Regional geology of the Kuusamo area:



Deposits and prospects in the Kuusamo Schist Belt. Geology from Silvennoinen (1992).
Solid and dashed, curved lines indicate boundaries between lithological units, faults and shear zones

Regional geology and mineral deposits of the Kuusamo area:



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