Ollinsuo

Occurence type: prospect

Commodity	Rank	Total measure	Total production	Total resource	Importance
gold	1	NA	NA	NA	NA
cobalt	2	NA	NA	NA	NA
copper	3	NA	NA	NA	NA
silver	4	NA	NA	NA	NA

Easting EUREF: 585805,869
Northing EUREF: 7335805,337

Easting YKJ: 3586013
Northing YKJ: 7338874

Discovery year: 1984
Discovered by: Geological Survey of Finland
Province: Kuusamo-Kuolajärvi (Co, Au)
District: Kuusamo (Co, Au)
Comments: Discovery by drilling into an airborne and ground electric + magnetic anomaly in a geologically "right" area
References: 9, 10, 14

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.
References: 11, 12, 13, 14, 15, 19, 20

Dimension

Expression: exposed
Form: discordant
Shape: NA
Length (m): 150
Width (m): 22
Thickness (m): NA
Depth (m): 150

Area (ha): NA
Dip azim: 335
Dip: 70
Plunge azim: NA
Plunge dip: NA
Orientation method: NA

Holder history

Current holder: Latitude 66 Cobalt Oy
Years: 2019-2025
Holding type: Exploration permit

Previous holders:

Company	Years	Holding type	Comments
Kuusamo Gold Oy	2015-2018	Exploration permit	NA
Dragon Mining Oy	2011	Exploration permit	App. for exploration permit
Polar Mining Oy	2010-2011	Claim reservation (old law)	NA
Belvedere Resources Ltd	2002-2005	Claim (old law)	NA
Geological Survey of Finland	1984-1987	Claim (old law)	NA

EXPLORATION ACTIVITY

Latitude 66 Cobalt Oy

Years	Activity type	Geologist	Exploration result	Ref
2022	detailed geochemistry	NA	NA	7
	Base of till sampling by drilling			

2021	detailed geophysics	Aaron Davies	NA	
	Electromagnetic ground survey in 2021.			

2020	core drilling	Aaron Davies	key geological features	4, 5, 6, 16
	Four diamond holes to be drilled in Aug-Sept 2022			
	Intersections			
	HoleID	NA		
	From-To	124,8-176,5		
	Length	51,7m		
	cobalt	0,44%		
	gold	0,24ppm		
	copper	0,07%		
	Comments	*Includes 8.3 m @ 1.02 % Co*		

Belvedere Resources Ltd

Years	Activity type	Geologist	Exploration result	Ref
2004-2004	detailed geophysics	NA	mineral occurrences	2, 3
	two geophysical surveys; magnetic and TEM surveys			

2004-2004	core drilling	NA	mineral occurrences	3, 8
	Core drilling (reconnaissance drilling): 2 diamond drill holes, in total 251 m			
	Intersections			
	HoleID	OLI002		
	From-To	94,6-103,7		
	Length	9,1m		
	gold	0,55ppm		
	cobalt	0,09%		
	copper	0,17%		
	Comments	*includes 1.6 m 2.29 ppm Au, 0.1 % Cu and 0.09 % Co from 95.2m*		
	HoleID	OLI002		
	From-To	134,6-144,8		
	Length	10,2m		
	gold	1,15ppm		
	cobalt	0,06%		
	copper	0,11%		

Geological Survey of Finland

Years	Activity type	Geologist	Exploration result	Ref
1989-1989	regional geochemistry	NA	geochemical anomaly	
	Country-wide till-geochemical survey			

1984-1987	detailed geology	Heikki Pankka	key geological features	1, 10, 11, 12, 13, 14

1984-1985	detailed geophysics	Heikki Pankka	geophysical anomaly	1, 10, 11, 12, 13, 14, 17

1984-1985	core drilling	Heikki Pankka	mineral occurrences	10, 18
	In total, 11 diamond-drill holes, total 1906 m, in 6 profiles 25-50 m apart.			
	Intersections			
	HoleID	R415		
	From-To	33,8-52,5		
	Length	18,7m		
	gold	1,1ppm		
	cobalt	0,12%		
	copper	0,18%		
	HoleID	R417		
	From-To	85,5-99,6		
	Length	14,1m		
	gold	3,3ppm		
	Comments	*Fire assay re-analysis for gold*		
	HoleID	R417		
	From-To	85,5-101,5		
	Length	16m		
	gold	1,7ppm		
	cobalt	1100ppm		
	copper	1200ppm		
	HoleID	R422		
	From-To	130,7-133,3		
	Length	2,6m		
	gold	5ppm		

1982-1982	regional geophysics	Heikki Pankka	key geological features	1, 10, 11, 12, 13, 14
	Low-altitude airborne magnetic, electromagnetic and radiometric survey			

GEOLOGY

Host rock: Sericite Paraschist

Sericite Paraschist (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 10, 11, 12, 13, 14, 18, 20

Ore minerals:

Mineral	Proportion	Mineral texture
Chalcopyrite	minor	
Cobaltite	minor	
Cobaltpentlandite	minor	
Gold	present	
	Native gold occurs associated with silicates.	
Magnetite	minor	
Pyrite	major	
Pyrrhotite	major	
Rucklidgeite	minor	
Scheelite	present	
Selenide	minor	
Uraninite	minor	

Other minerals:

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

Structures
Sheared
Comments: Controlling structure: An antiform structure. NW-trending, steeply NE(?)-dipping shear zone

Alteration:	Distribution:	Degree:	Relation to mineralization:
silicification	NA	NA	Post
albitic alteration	NA	Strong	Pre
Comments: Locally intense albitisation 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	epidote amphibolite metamorphic facies	low metamorphic grade	NA		
Comments: Quartz-sericite-dolomite-biotite mineral assemblage					

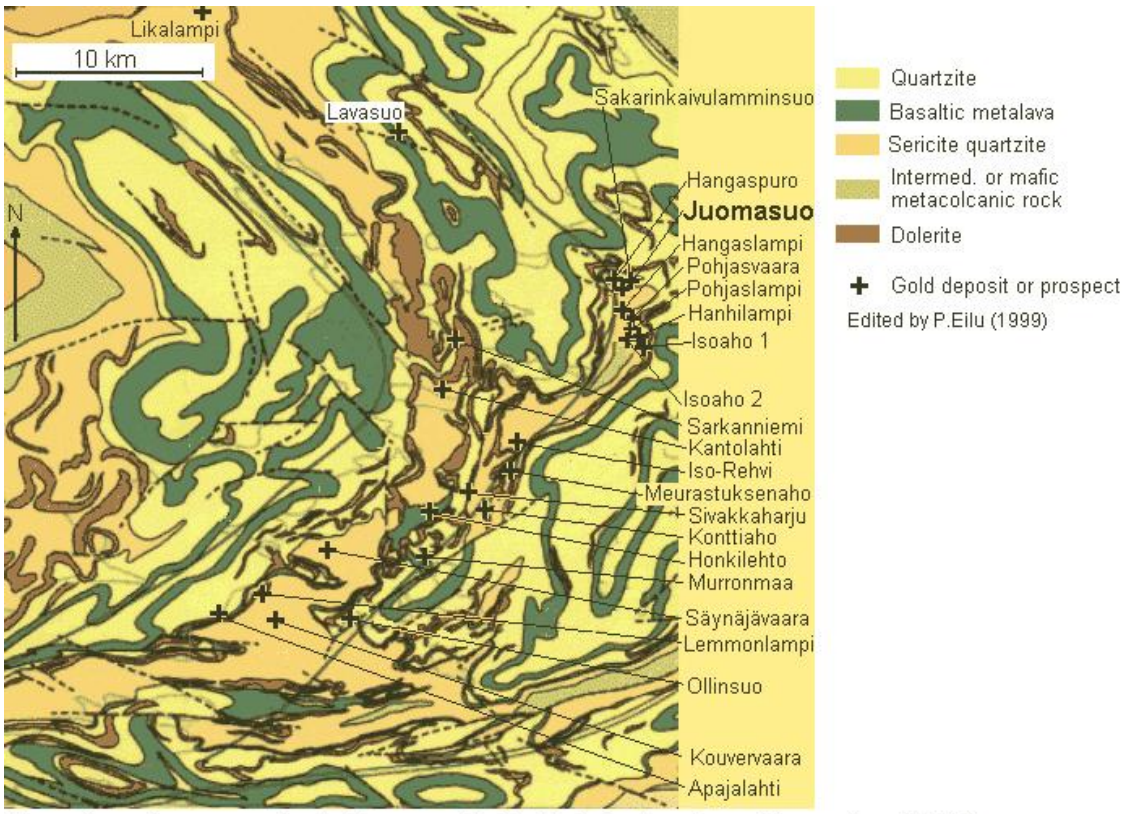
Geological age:

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.			
Paleoproterozoic (2500-1600 Ma)	1600-2500		N

Figures

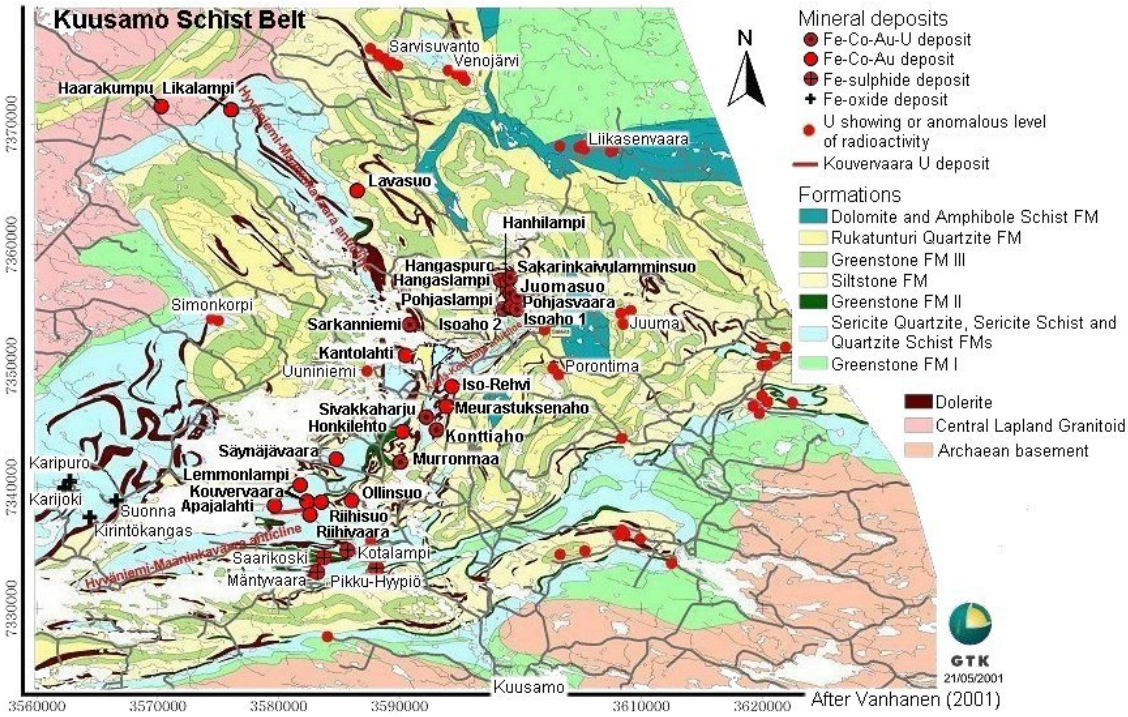
Regional geology of the Kuusamo area

:



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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