Tiitola

Occurence type: occurrence

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

Easting EUREF: 400134,184
Northing EUREF: 7110425,174
Easting YKJ: 3400266
Northing YKJ: 7113404

Discovery year: 1994
Discovered by: Geological Survey of Finland
Province: Laivakangas (Au, Cu)
District: Vesiperä (Au, Cu, Ag)
Comments: Discovery: detected in outcrop during bedrock mapping in an area initially suggested prospective by glacial erratic boulders found by an amateur prospector

References: 3, 5, 7

Mineral deposit type

Group: Metallogenic deposit
Main type: Orogenic (metamorphic hydrothermal)
References: 6

Dimension

Expression: exposed
Form: discordant
Shape: NA
Length (m): NA
Width (m): NA
Thickness (m): NA
Depth (m): NA
Area (ha): NA
Dip azim: NA
Dip: NA
Plunge azim: NA
Plunge dip: NA
Orientation method: NA

Holder history

Current holder: Lakeuden Malmi Oy
Years: 2020
Holding type: Application for exploration permit

Previous holders:

Company	Years	Holding type	Comments
BR Gold Mining Oy	2014	Claim (old law)	Joint Venture between Belvedere and REB gold Corporation established in 2011
Belvedere Resources Ltd	2006-2012	NA	NA
Endomines Oy	2001	NA	NA
Geological Survey of Finland	1994-1996	Claim (old law)	NA

EXPLORATION ACTIVITY

Geological Survey of Finland

Years	Activity type	Geologist	Exploration result	Ref
1994-1995	detailed geology	Kaj Västi	NA	1, 2, 4, 6
	Detected in outcrop during bedrock mapping in an area initially suggested prospective by glacial erratic boulders found by an amateur prospector.			

1994-1995	detailed geophysics	Kaj Västi	NA	6
	Ground IP survey indicates the position of the mineralised shear zones.			

1994-1995	core drilling	Kaj Västi	NA	6
	Core drilling (reconnaissance drilling): 11 diamond-drill holes, total 387 m.			
	Intersections			
	HoleID	NA		
	From-To	NA		
	Length	1,4m		
	gold	1,34ppm		
	HoleID	NA		
	From-To	NA		
	Length	1,3m		
	gold	4,58ppm		

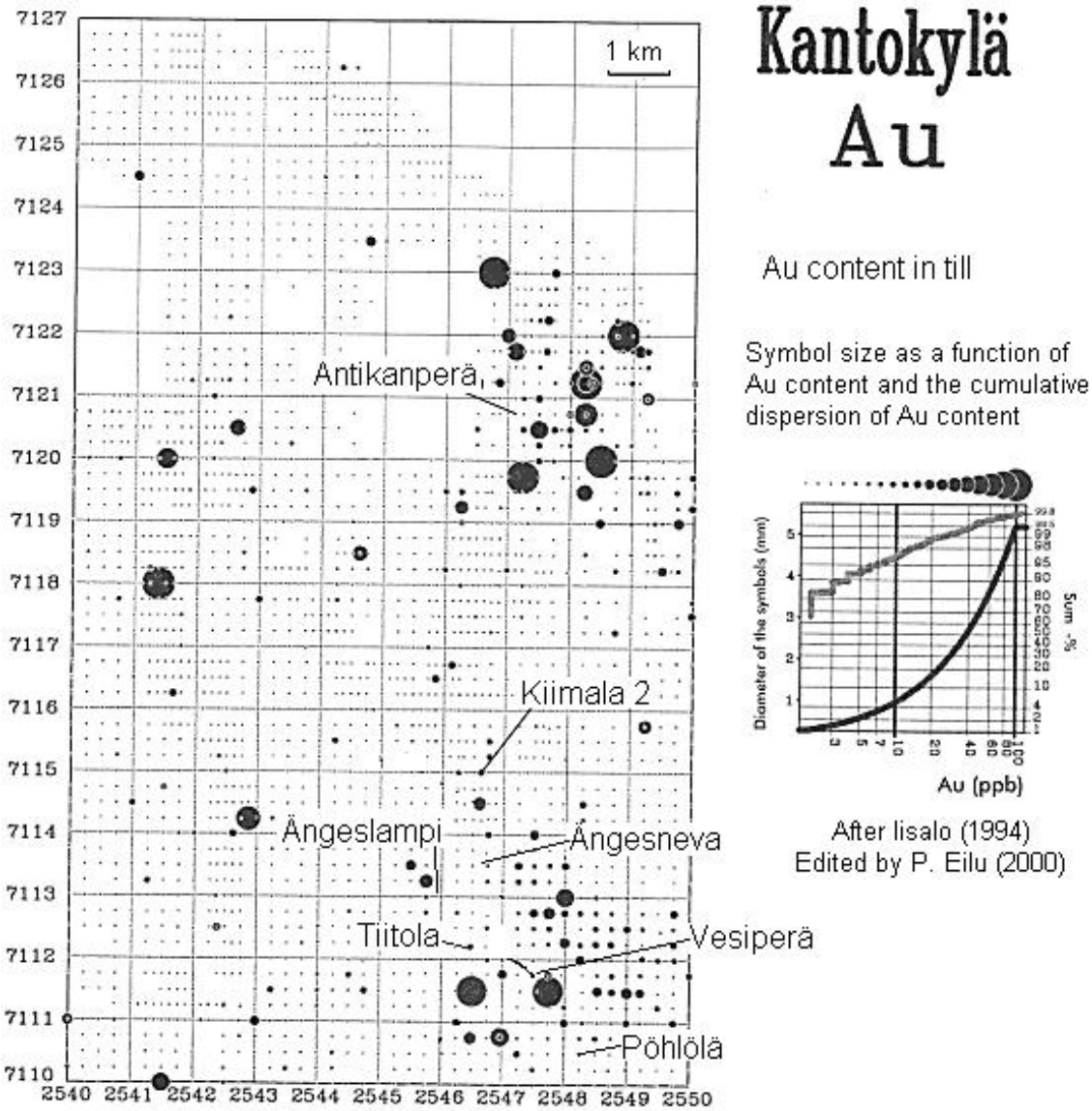
1987-1987	detailed geochemistry	Kaj Västi	NA	1, 2, 4, 6

1983-1983	regional geochemistry	NA	NA	
	Regional geochemical till survey			

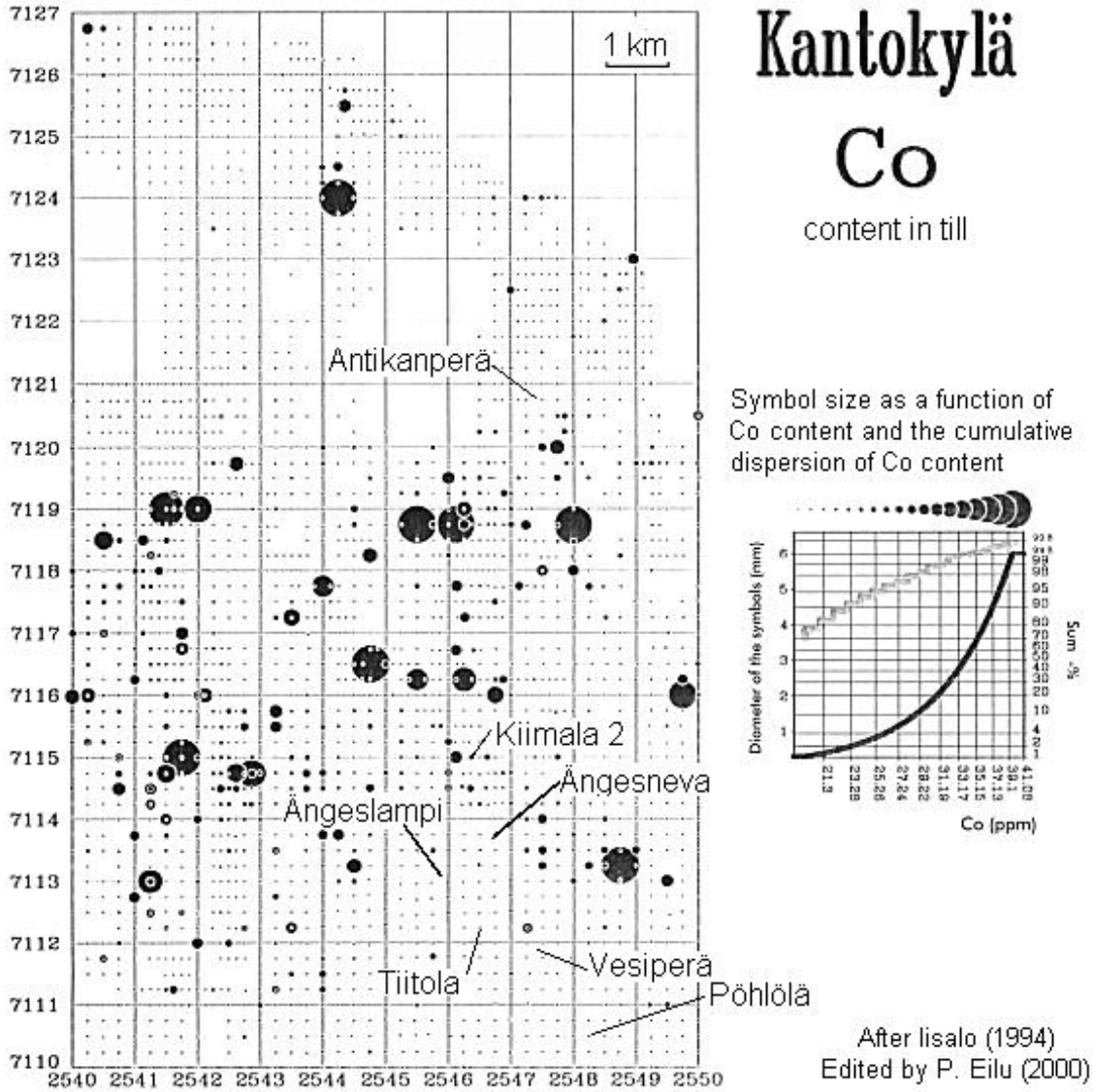
1976-1976	regional geophysics	NA	key geological features	
	Low-altitude airborne magnetic, electromagnetic and radiometric survey			

Figures

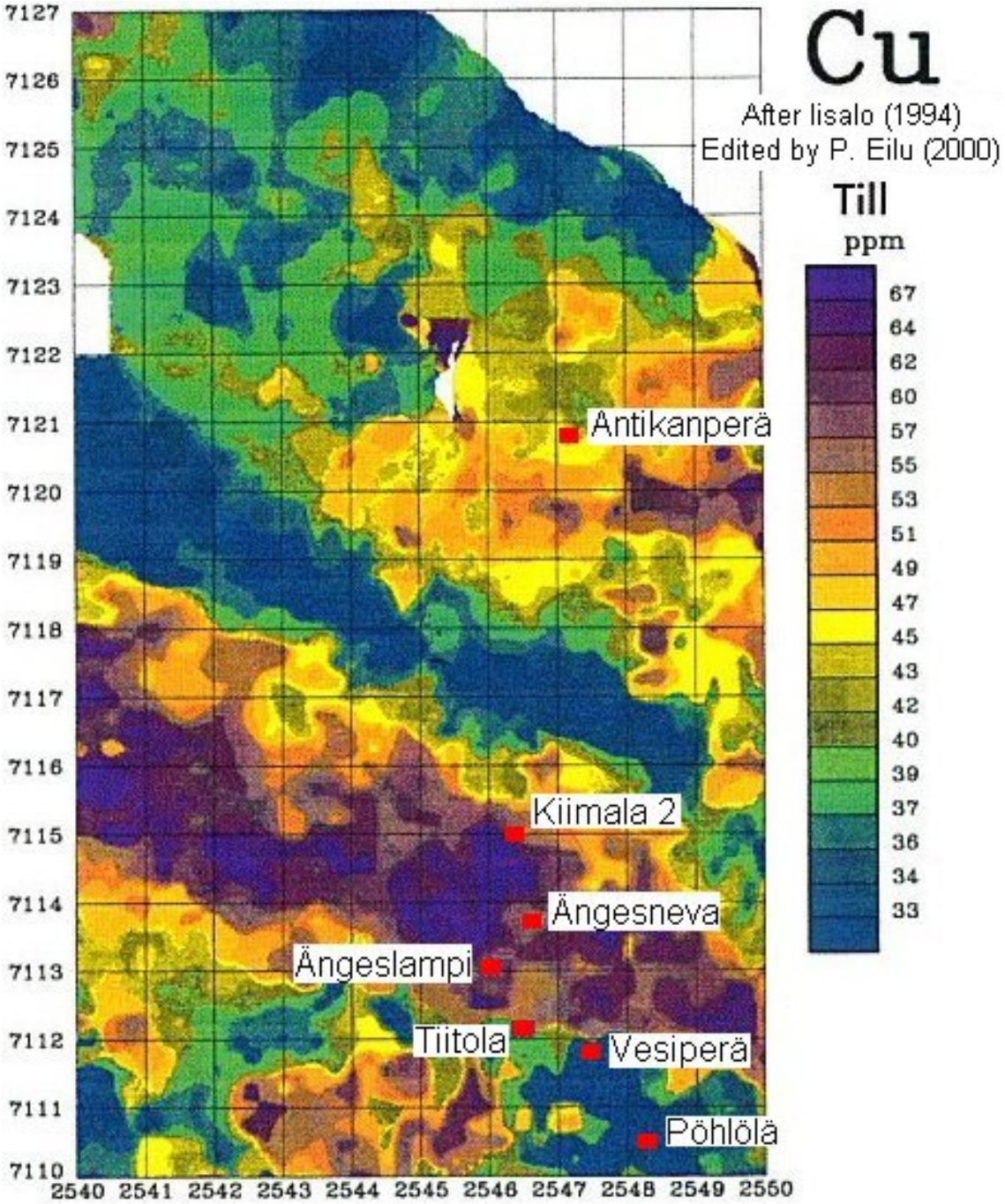
Secondary anomaly; Au content in till:



Secondary anomaly; Co content in till:



Secondary anomaly; Cu content in till:



GEOLOGY

Host rock: Gabbro

Gabbro (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 6
Comments: Controlling structure; A set of a few millimetres to several metres wide NNE-trending shear bands and shear zones. The deposit is close to the NW-trending Ruhaperä shear zone which is one of the main structures of the Raahe-Ladoga suture zone.

Ore minerals:

Mineral	Proportion	Mineral texture
Arsenopyrite	major	
Chalcopyrite	minor	
Cubanite	minor	
Gold	minor	
	Native gold is dominantly associated with arsenopyrite and the Bi mineral.	
Graphite	minor	
Mackinawite	minor	
Marcasite	minor	
Pyrite	major	
Pyrrhotite	major	
Sphalerite	minor	

Other minerals:

Mineral	Proportion	Mineral texture
Biotite	present	
Calcite	present	
Plagioclase	present	
Quartz	present	
Tourmaline	present	

Textures
Granoblastic

Alteration:	Distribution:	Degree:	Relation to mineralization:
carbonate alteration	NA	NA	NA
silicification	NA	NA	NA

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		

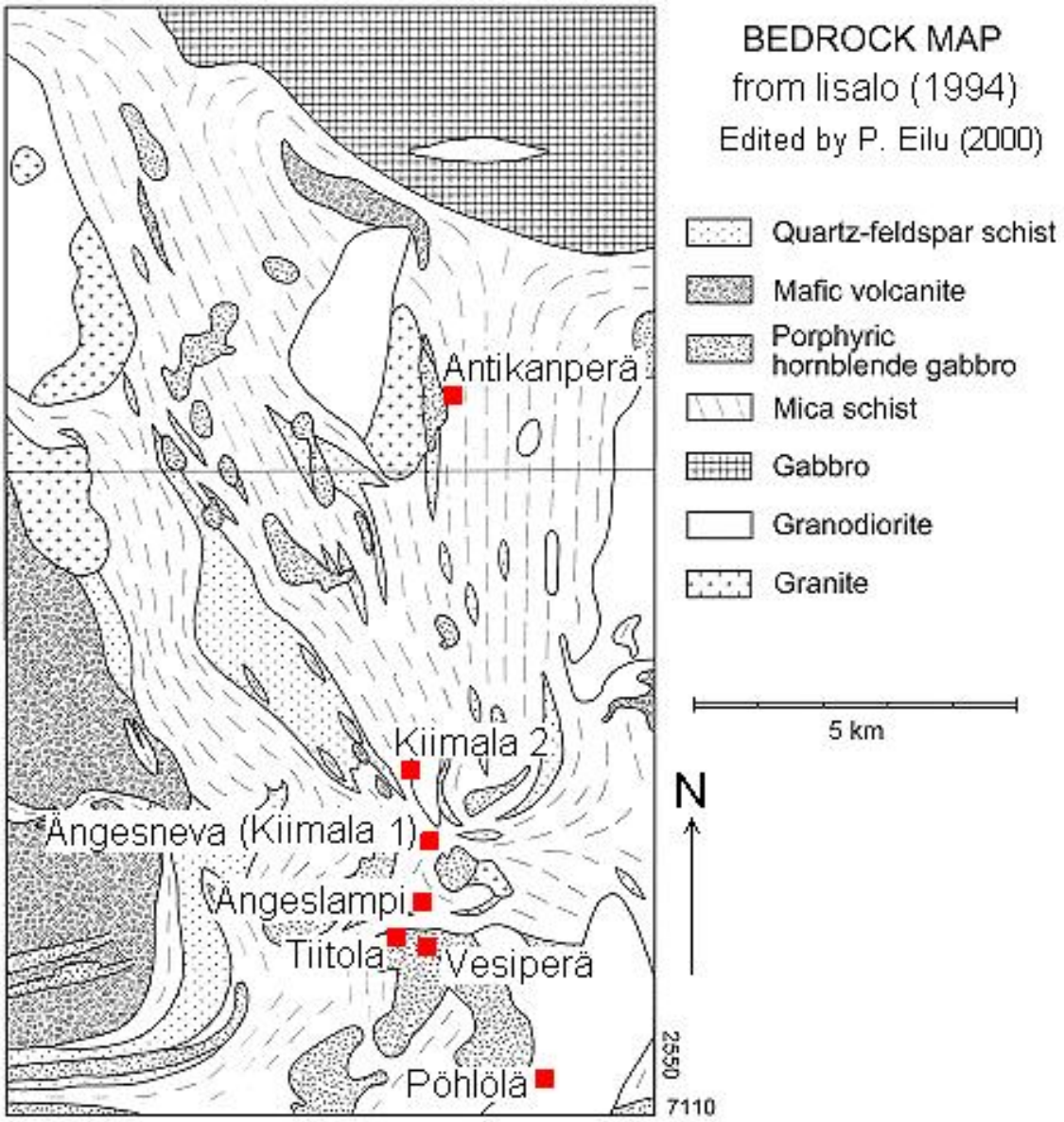
Comments: Metamorphic mineral assemblage: Plagioclase-hornblende-biotite-titanite-magnetite-ilmenite.

Geological age:

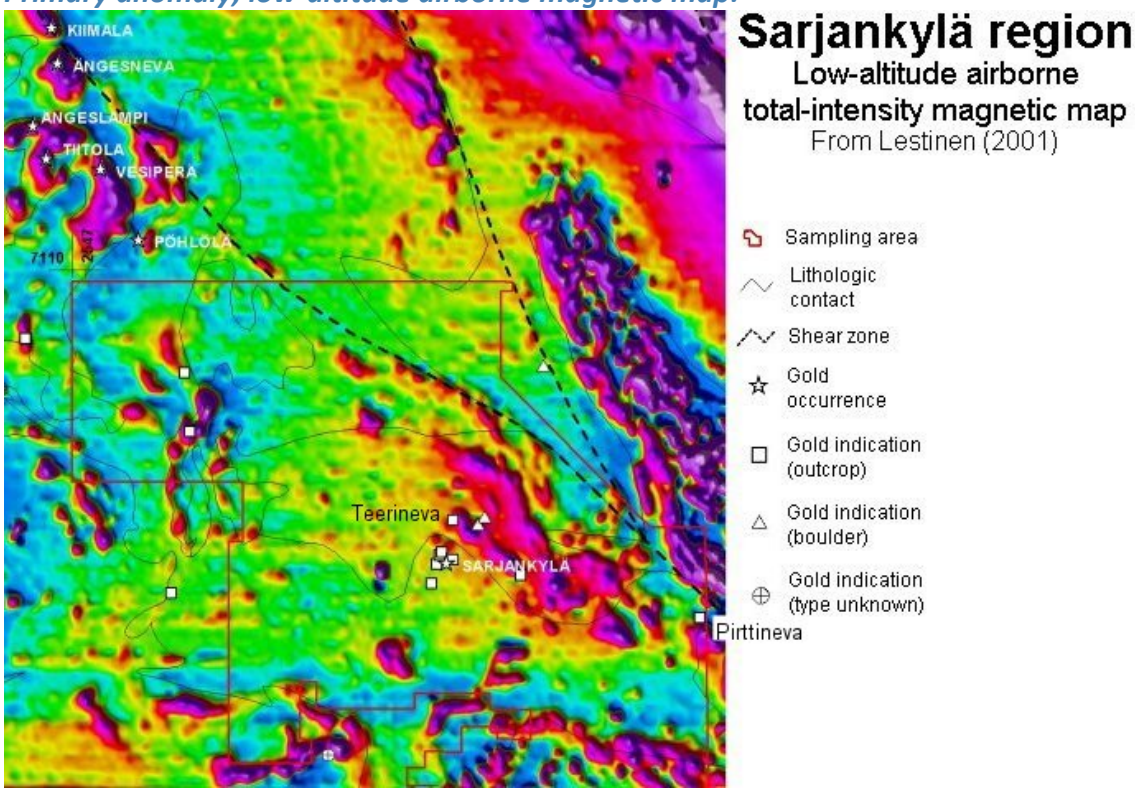
Geological era:	Max age - Minage (Ma):	Inferred age (Ma):	Age of mineralization:
Paleoproterozoic (2500-1600 Ma)	1600-2500		N

Figures

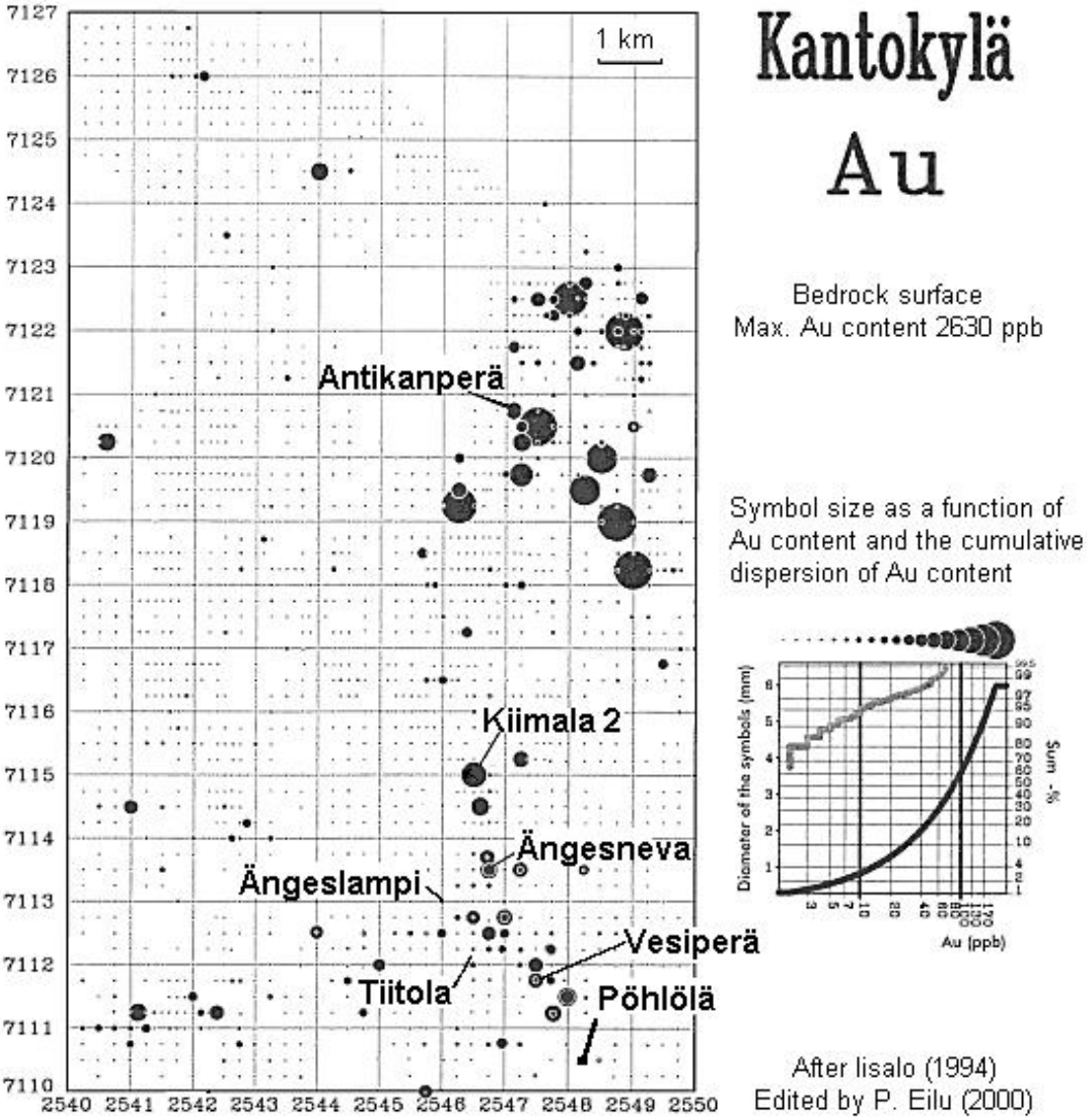
Regional geology:



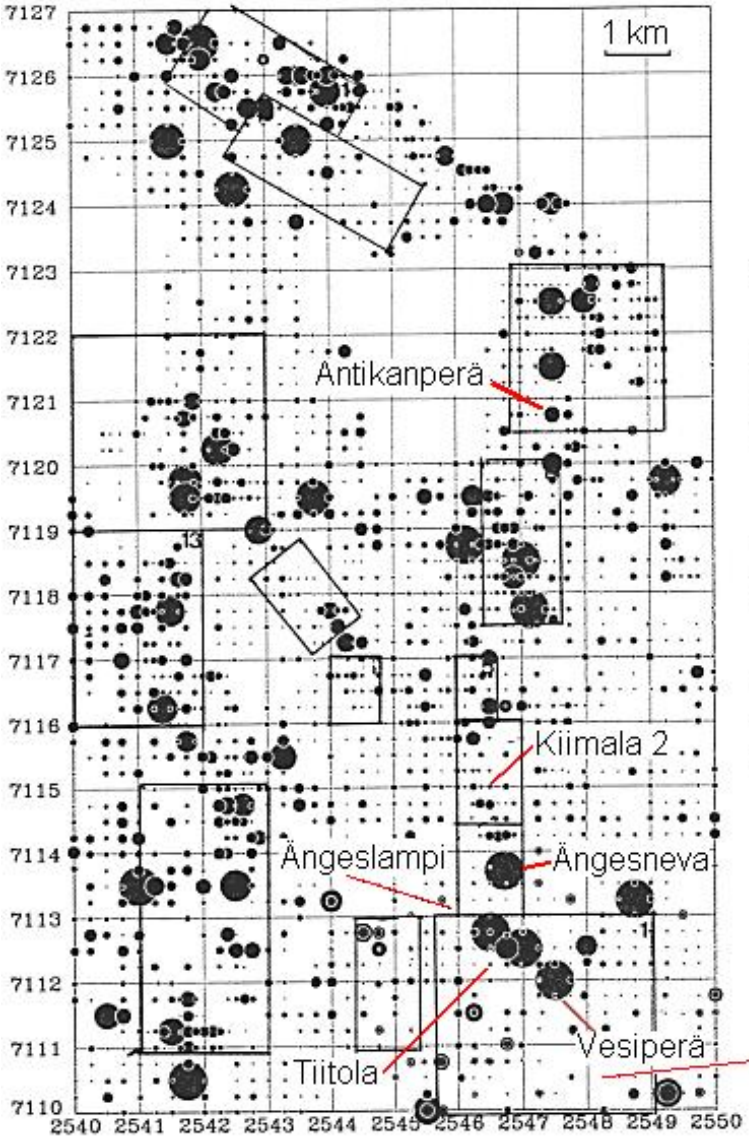
Primary anomaly; low-altitude airborne magnetic map:



Primary anomaly; Au content at the surface of bedrock:



Primary anomaly; Co content at the surface of bedrock:

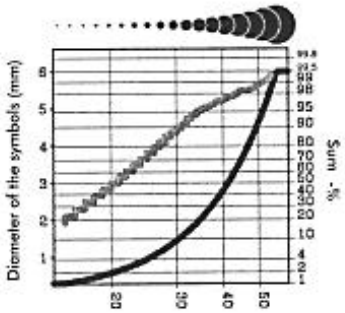


Kantokylä

Co

Bedrock surface
Max. Co content 224 ppm

Symbol size as a function of Co content and the cumulative dispersion of Co content



After Iisalo (1994)
Edited by P. Eilu (2000)

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