Ängeslampi

Occurence type: occurrence

Commodity	Rank	Total measure	Total production	Total resource	Importance
gold	1	NA	NA	NA	NA
copper	3	NA	NA	NA	NA

Easting EUREF: 399911
Northing EUREF: 7111015

Easting YKJ: 3400043
Northing YKJ: 7113994

Discovery year: 1986
Discovered by: Geological Survey of Finland
Province: Laivakangas (Au, Cu)
District: Vesiperä (Au, Cu, Ag)
Comments: First indications were gold-enriched boulders and an outcrop was found by V. Autio during geological mapping survey
References: 6, 7

Mineral deposit type

Group: Metallogenic deposit
Main type: Orogenic (metamorphic hydrothermal)
Comments: An orogenic "mesothermal" mineralisation with a distinct structural control

References: 7

Dimension

Expression: exposed
Form: discordant
Shape: irregular
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
Magnus Minerals Oy	2017	Reservation	Application for reservation notification
BR Gold Mining Oy	2014	Claim (old law)	Joint Venture between Belvedere and REB gold Corporation established in 2011

Belvedere Resources Ltd	2006-2011	Claim (old law)	NA
Endomines Oy	2001	NA	NA
Geological Survey of Finland	1986-1987	Claim (old law)	NA

EXPLORATION ACTIVITY

Geological Survey of Finland

Years	Activity type	Geologist	Exploration result	Ref
1986-1987	detailed geology	Esko Sipilä	mineral occurrences	3, 5, 7
	The first indications: similar geophysical anomalies under a peat bog as for the Vesiperä mineralisation and glacial erratic boulders containing 5-20 ppm Au. These anomalies were checked by till and bedrock surface sampling; the latter indicated the presence of a Au mineralisation.			

1986-1987	detailed geochemistry	Esko Sipilä.	NA	2, 5

1986-1987	excavation	Esko Sipilä	key geological features	2, 3, 5, 7
	Trenching trhough the overburden			

1986-1987	core drilling	Esko Sipilä	mineral occurrences	7
	8 Diamond-drill holes, total 468 m.			
	Intersections			
	HoleID	R323		
	From-To	17-20		
	Length	3m		
	gold	5ppm		

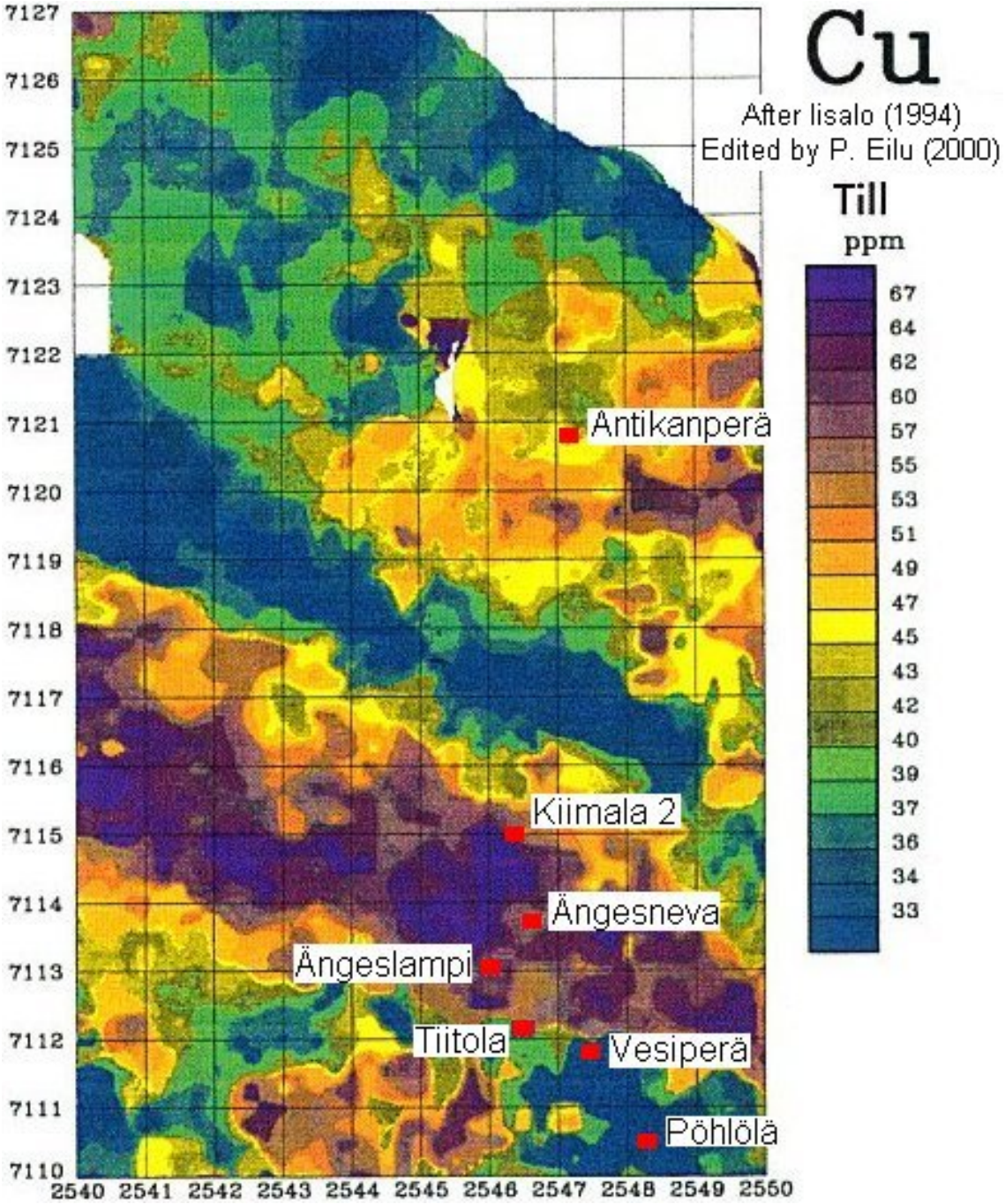
1986-1986	detailed geophysics	Esko Sipilä	key geological features	7
	Ground magnetic electromagnetic (slingram) and IP survey			

1983-1983	regional geochemistry	NA	NA	
	Regional geochemical till survey			

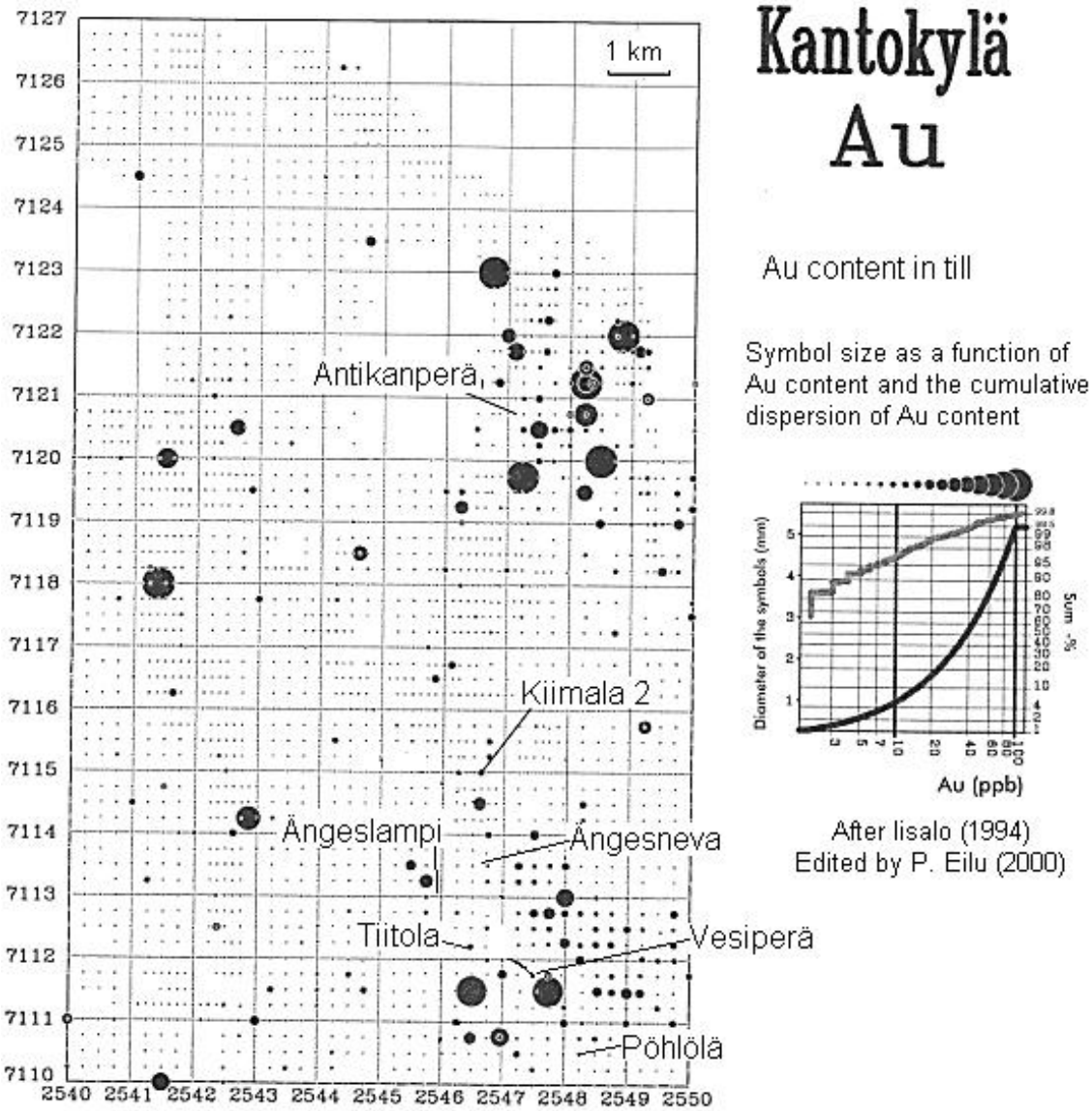
1976-1976	regional geophysics	NA	key geological features	1, 2, 3, 5, 7, 8
	Low-altitude airborne magnetic, electromagnetic and radiometric survey			

Figures

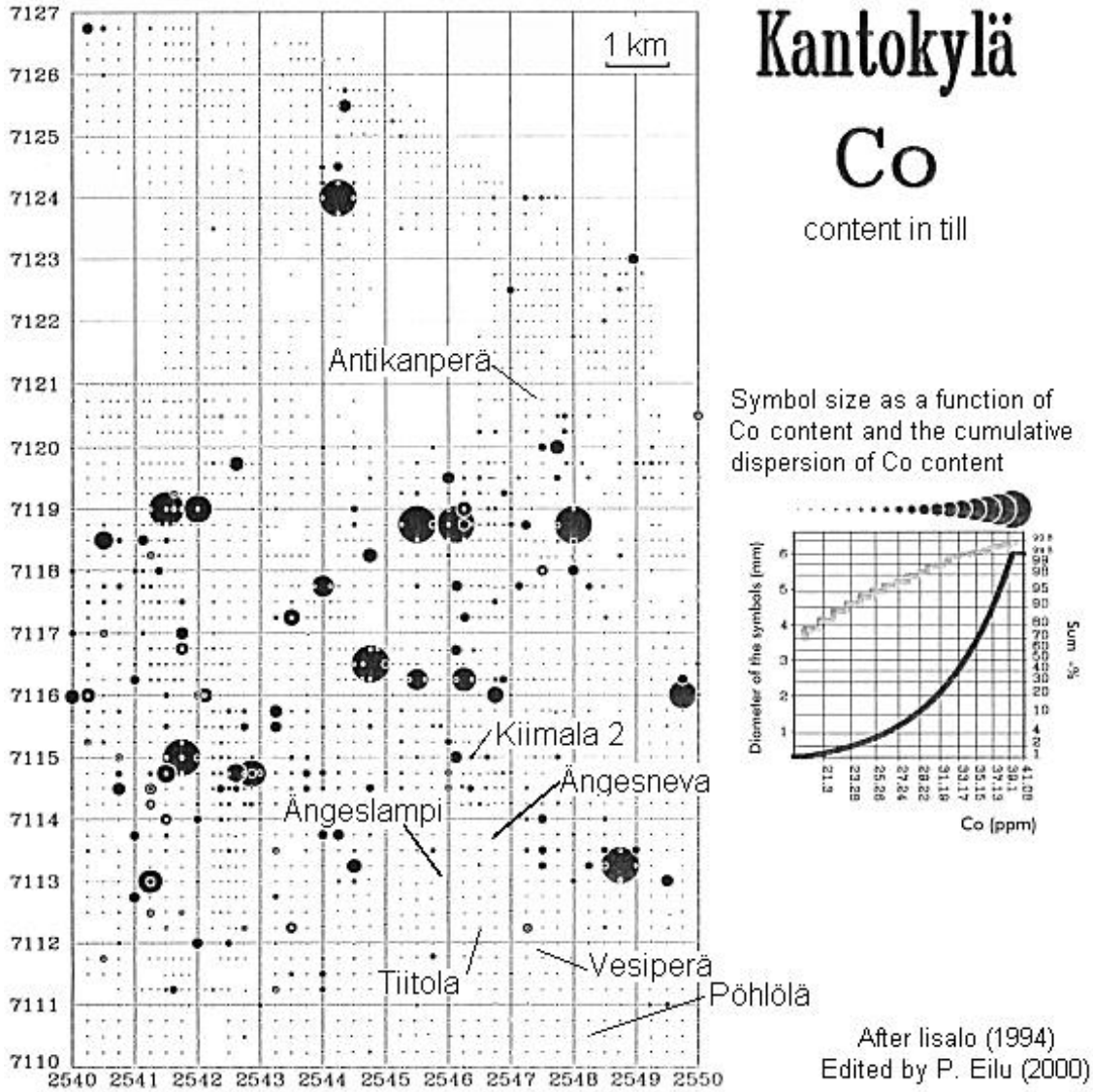
Secondary anomaly; Cu content in till:



Secondary anomaly; Au content in till:



Secondary anomaly; Co content in till:



GEOLOGY

Host rock: Plagioclase porphyrite
Wall rock: Paraschist, Felsic volcanic rock

Plagioclase porphyrite (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 2, 4, 7
Comments: 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	
Gold	minor	
Pyrite	major	
Rutile	minor	
Telluride	minor	
	Bi Telluride	
Tetrahedrite	minor	

Other minerals:

Mineral	Proportion	Mineral texture
Plagioclase	present	
Quartz	present	
Tourmaline	present	

Structures
Veined
Comments: Auriferous, arsenopyrite-bearing quartz veins

Textures
Porphyritic
Comments: Plagioclase phenocrysts

Metamorphic description:

Type:	Facies:	Degree:	Relation to mineralization:	Min P- Max P (kbar)	MIn T- Max T (°C)
Regional	amphibolite metamorphic facies	high metamorphic grade	NA		
Comments: Peaked at upper-amphibolite facies (garnet-cordierite-K feldspar-biotite grade) conditions at ca. 1.89-1.87 Ga. Plagioclase-hornblende-quartz-biotite-titanite.					

Paraschist (Wall rock)

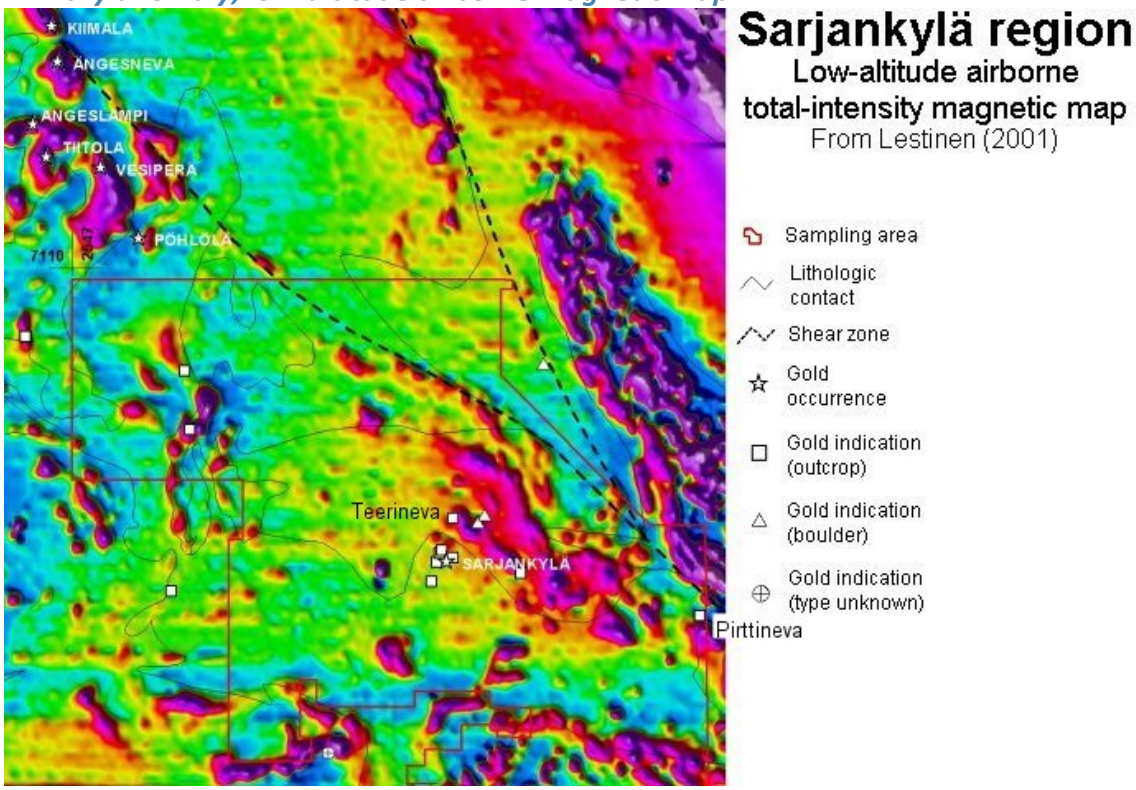
Rock type: Wall rock
Proportion: major
References: 7

Felsic volcanic rock (Wall rock)

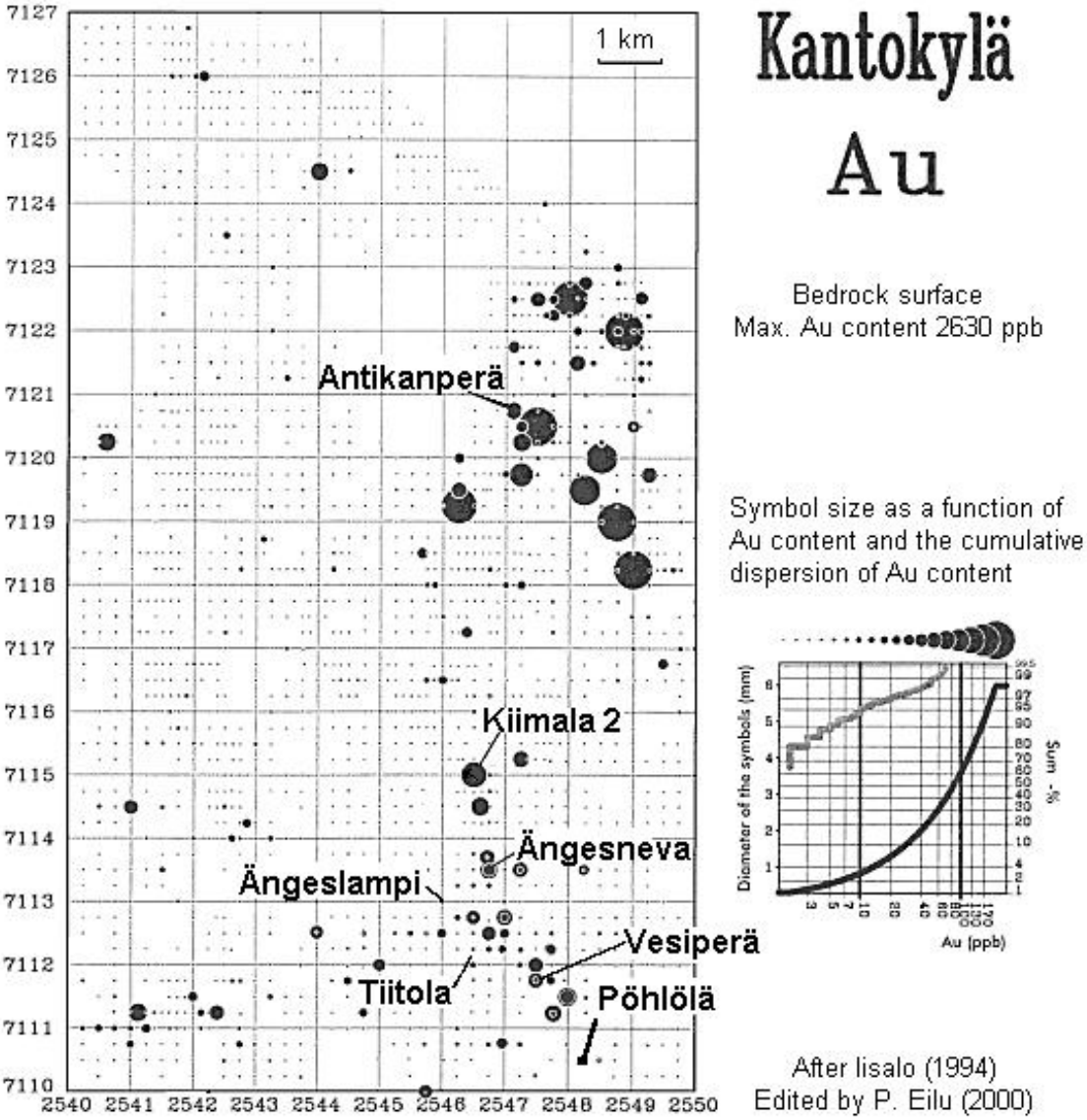
Rock type: Wall rock
Proportion: minor
References: 7

Figures

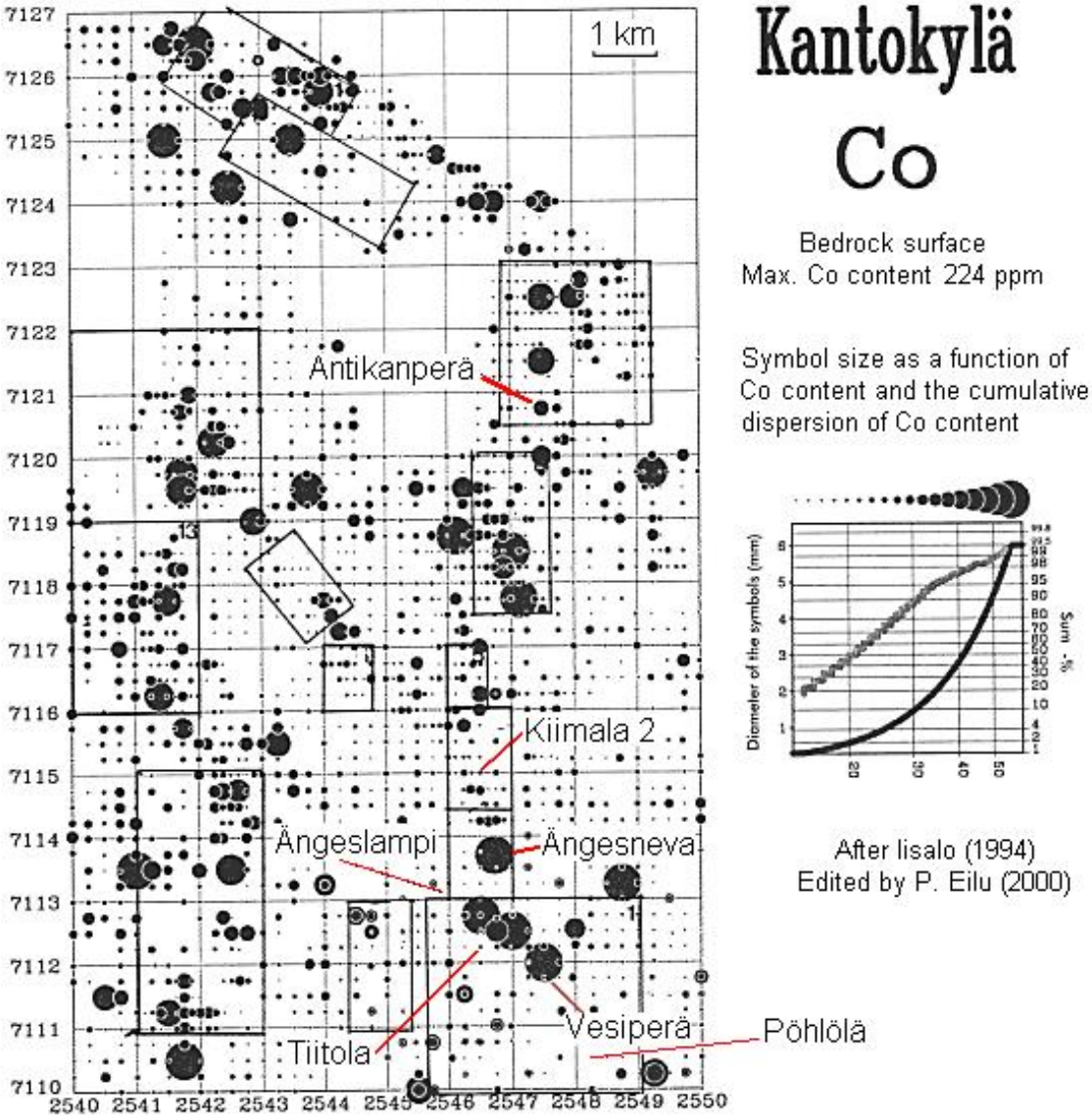
Primary anomaly; low-altitude airborne magnetic map:



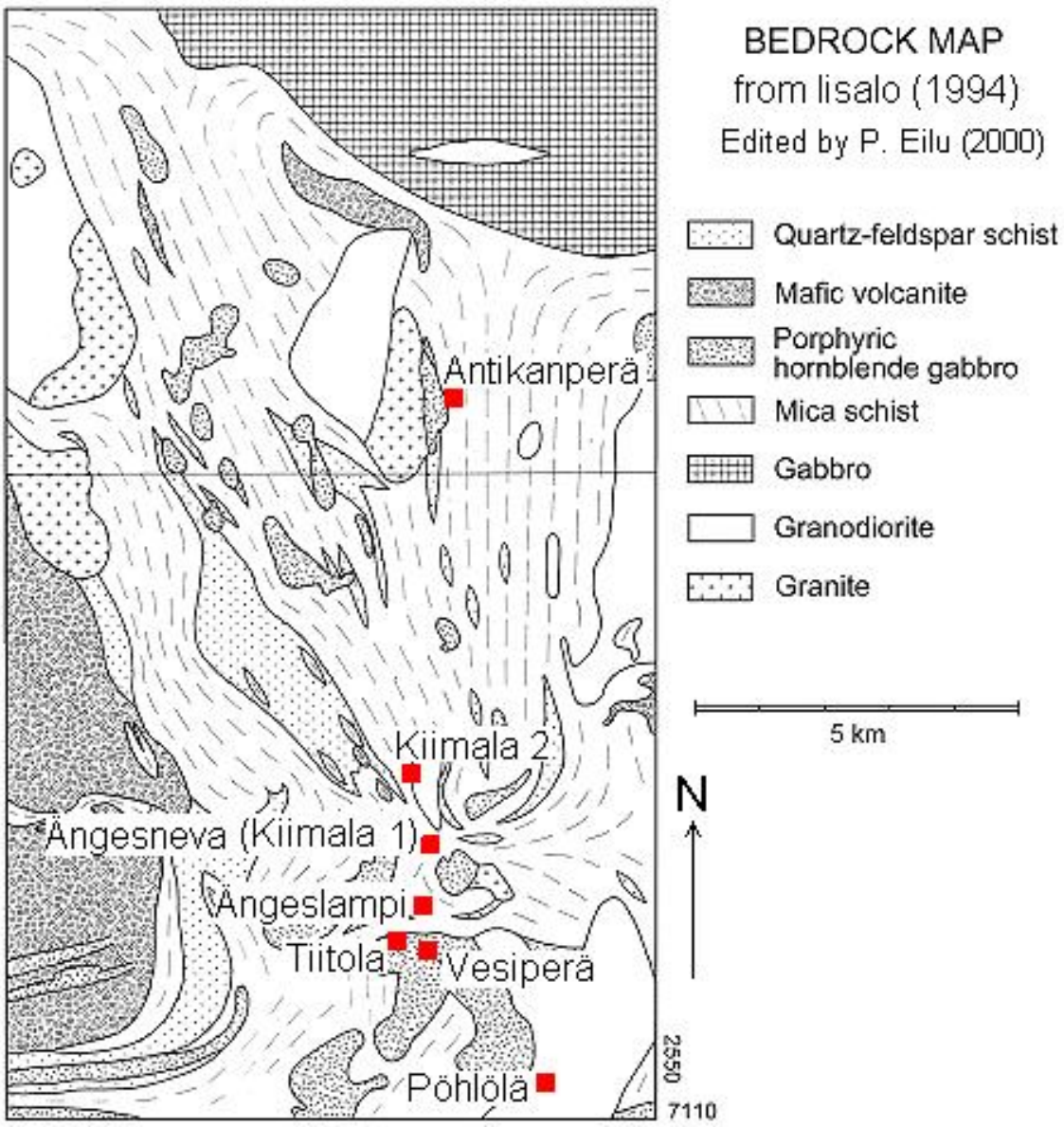
Primary anomaly; Au content at the surface of bedrock:



Primary anomaly; Co content at the surface of bedrock:



Regional geology:



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