Timanttimaa

Occurence type: occurrence

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

Easting EUREF: 308225,496
Northing EUREF: 6942594,996
Easting YKJ: 3308319
Northing YKJ: 6945507

Discovery year: 1986
Discovered by: Geological Survey of Finland
Province: Seinäjoki (Au, Sb)
Comments: First indications were outcrop samples found by amateur prospectors in 1986; this was followed, by GTK, by the discovery of a till geochemical anomaly and then bedrock mapping and sampling led to the actual discovery.
References: 1, 2

Mineral deposit type

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

Dimension

Expression: exposed
Form: discordant
Shape: irregular
Length (m): NA
Width (m): NA
Thickness (m): 20
Depth (m): NA
Area (ha): NA
Dip azim: NA
Dip: NA
Plunge azim: NA
Plunge dip: NA
Orientation method: NA

Holder history

Current holder: Southern Ostrobothnia Minerals Oy
Years: 2017
Holding type: Application for exploration permit

Previous holders:

Company	Years	Holding type	Comments
Geological Survey of Finland	NA	NA	NA
Mineral Exploration Network (Finland) Limited	2017	Application for exploration permit	NA
Mineral Exploration Network (Finland) Limited	2011-2012	Claim reservation (old law)	NA

EXPLORATION ACTIVITY

Geological Survey of Finland

Years	Activity type	Geologist	Exploration result	Ref
1987-1991	regional geochemistry	Niilo Kärkkäinen.	NA	3
	A combined Au-As-Cu anomaly in till extends, apparently, hundreds of metres from the mineralisation along the trend of glacial transport.			

1987-1991	core drilling	Niilo Kärkkäinen.	NA	2, 3
	9 diamond-drill holes, total 910 m, with 20-70 m distances between the holes.			
	Intersections			
	HoleID			
	From-To	NA		
	Length	3m		
	gold	1,8ppm		
	Comments			
	HoleID	R302		
	From-To	94,5-96		
	Length	1,5m		
	gold	15,5ppm		
	HoleID	NA		
	From-To	NA		
	Length	1,4m		
	gold	1,8ppm		

1987-1991	detailed geology	Niilo Kärkkäinen.	NA	2, 3

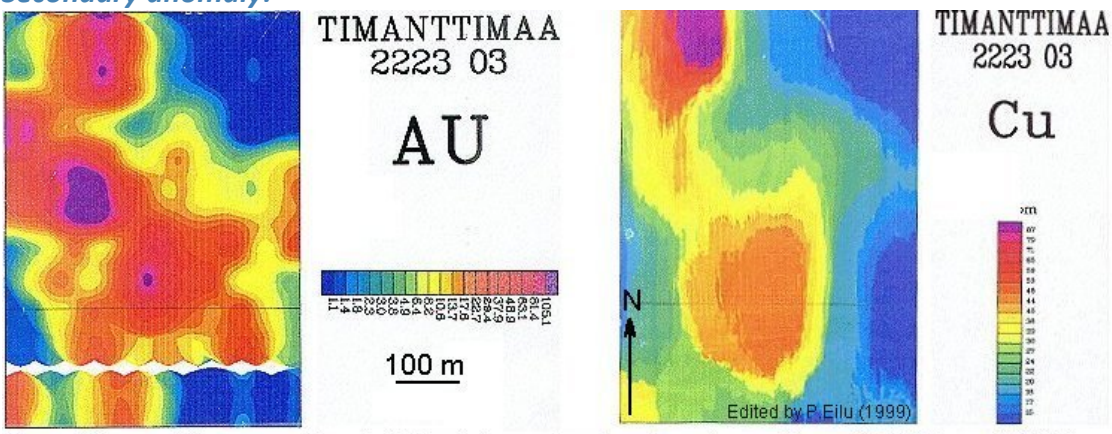
1987-1991	excavation	Niilo Kärkkäinen.	NA	2, 3

1987-1991	detailed geophysics	Niilo Kärkkäinen.	NA	3
	Three of the five IP anomalies in the area indicate the locations of the weakly sulphidised, auriferous shear zones.			

1982-1982	regional geophysics	NA	key geological features	
	Low-altitude airborne magnetic, electromagnetic and radiometric survey			

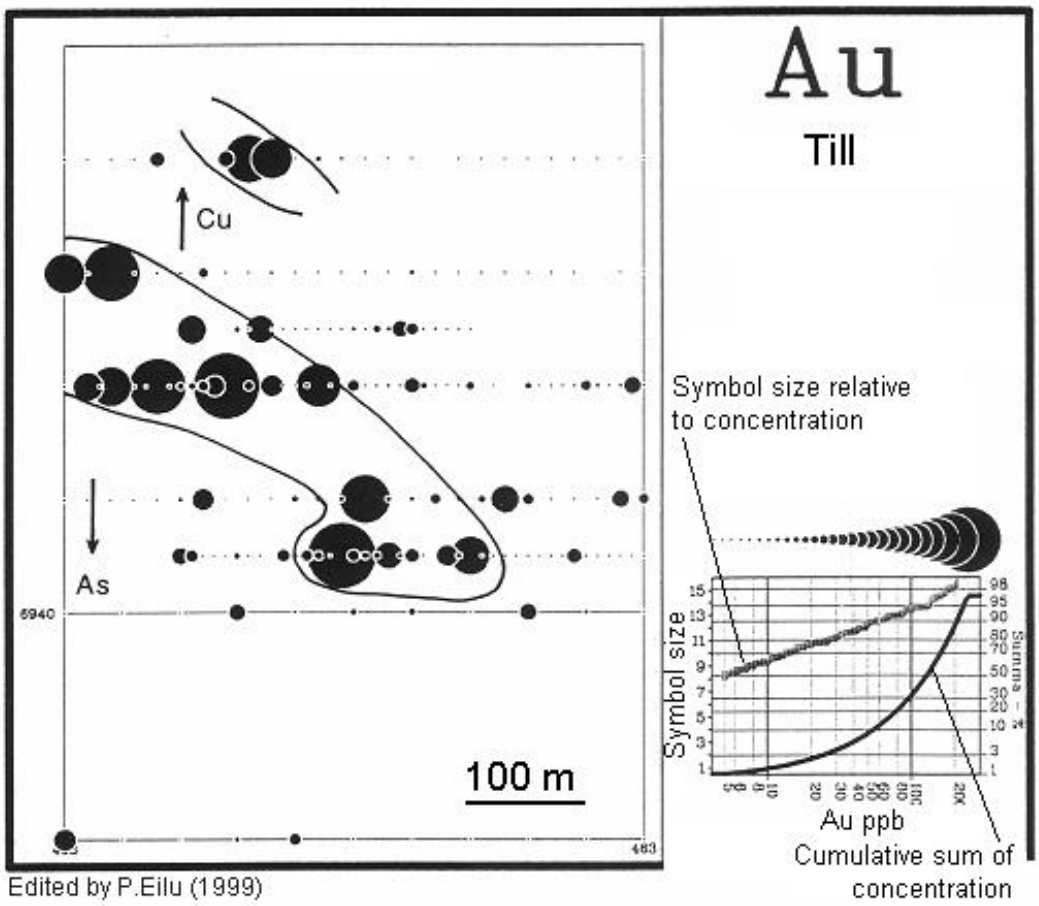
Figures

Secondary anomaly:



Local Au and Cu anomalies in till just above bedrock surface. From Kärkkäinen (1993).

Secondary anomaly:



Au contents in till at Timanttimaa. From Kärkkäinen (1993).

RESOURCES AND RESERVES

Most recent

Type:	Company:	Year:	Date:	Calc Method:	Reference:
Resource	Geological Survey of Finland	1993	NA	Non-compliant resource estimate	2
	Category:	**Poorly estimated mineral resource, poorly documented**			
	Tonnage:	**1 Mt**			
	gold	1 ppm			
	Cutoff:	**NA**			

GEOLOGY

Host rock: Tonalite, Plagioclase porphyrite

Tonalite (Host rock)

Rock type: Host rock
Proportion: minor
Grain size: NA
Color: NA
References: 2, 3
Comments: The mineralisation is in the contact zone between the synorogenic Haapaluoma tonalite and the intermediate metavolcanic rock. An auriferous quartz vein network

Plagioclase porphyrite (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 2, 3
Comments: This "metavolcanic rock" (i.e. the major host rock) may, actually, be a volcanogenic metasedimentary rock. An auriferous quartz vein network

Ore minerals:

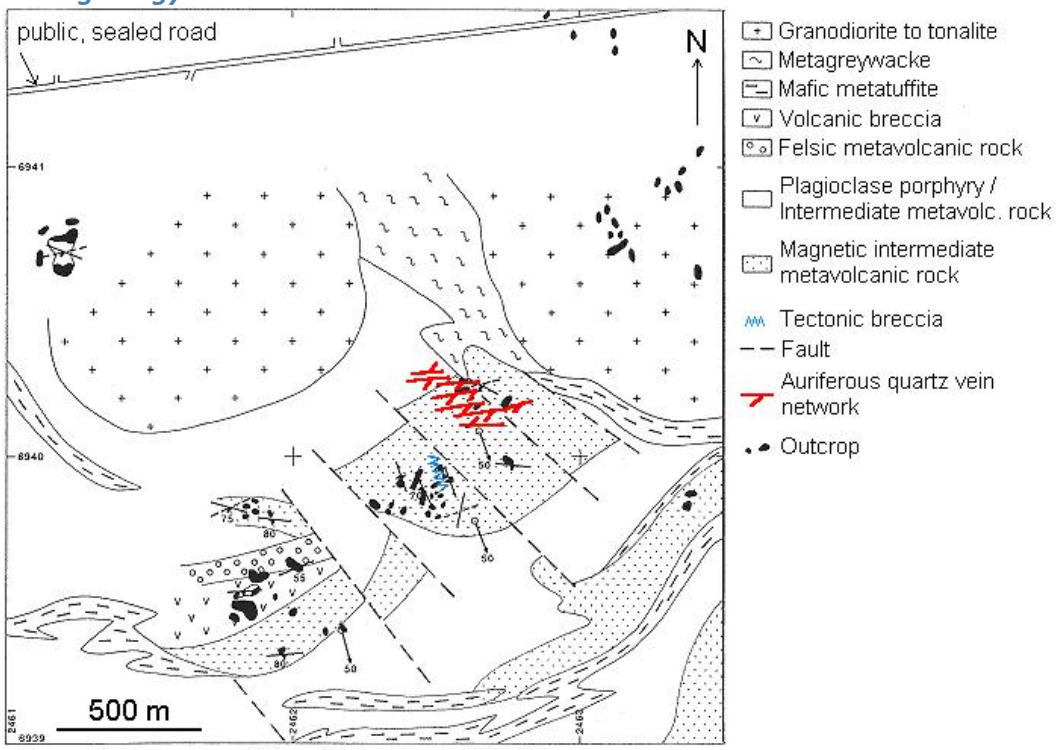
Mineral	Proportion	Mineral texture
Arsenopyrite	major	
Chalcopyrite	minor	
Gold	minor	
	Chiefly native Au in quartz veins	
Pyrrhotite	major	

Other minerals:

Mineral	Proportion	Mineral texture
Biotite	present	Alteration product
Calcite	present	
Chlorite	present	
Plagioclase	present	
Quartz	present	
Scheelite	present	

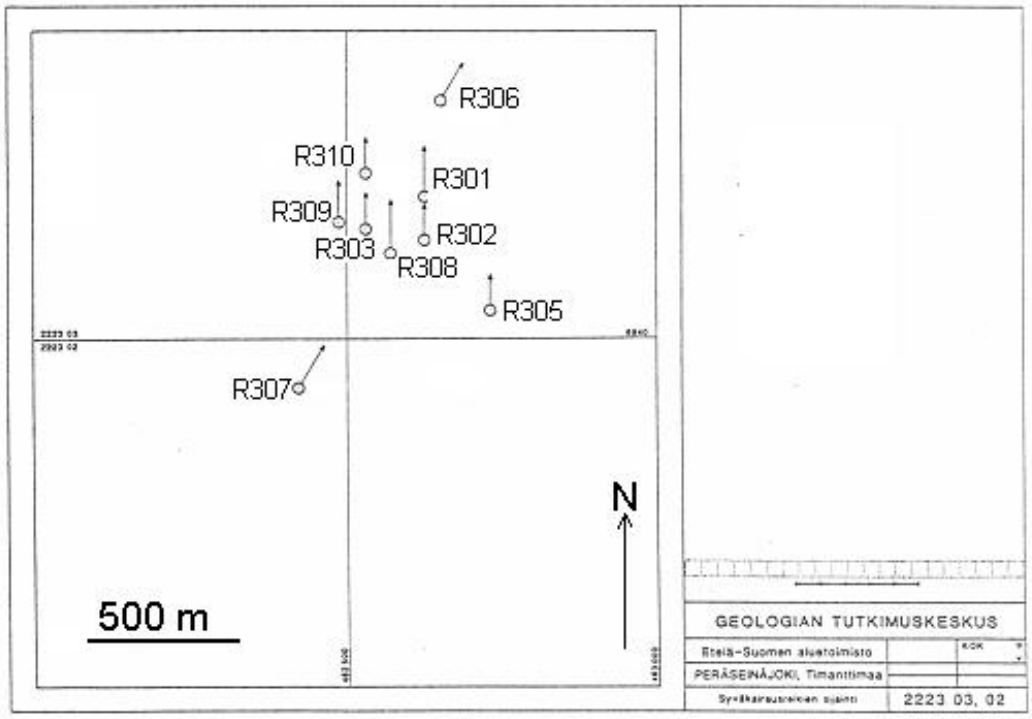
Figures

Local geology:

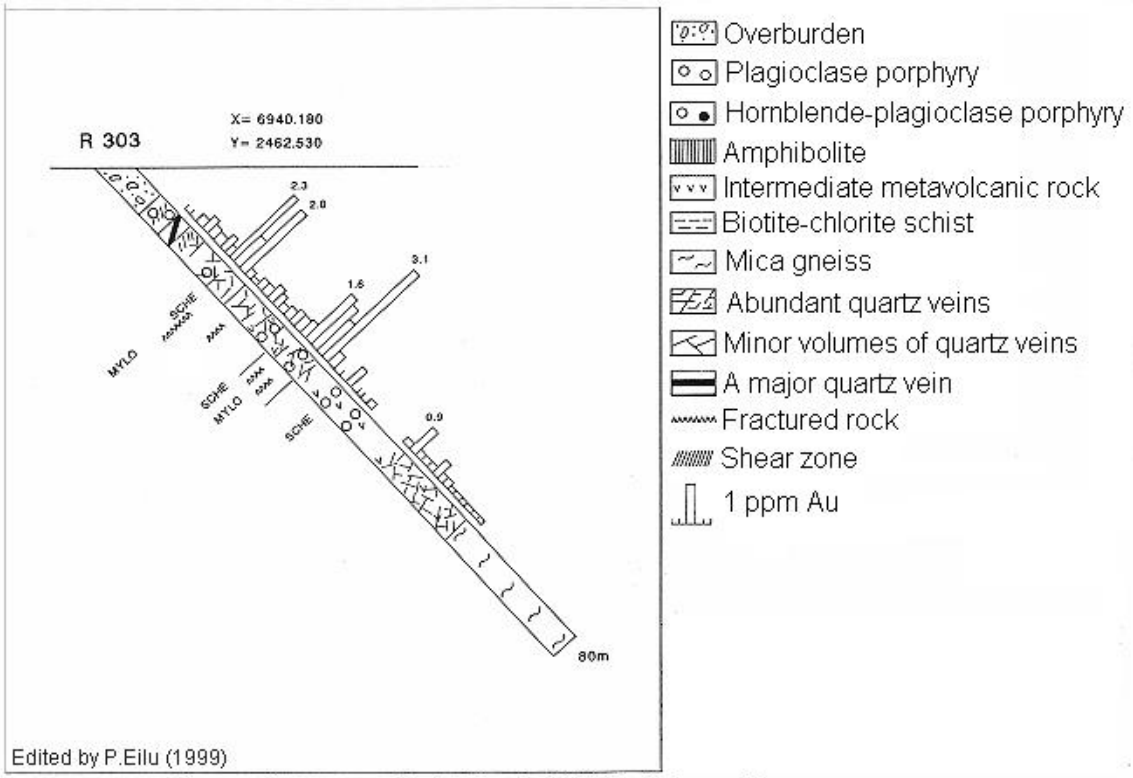


Timanttimaa area. After Kärkkäinen (1993).
Edited by P.Eilu (1999)

Plan view:

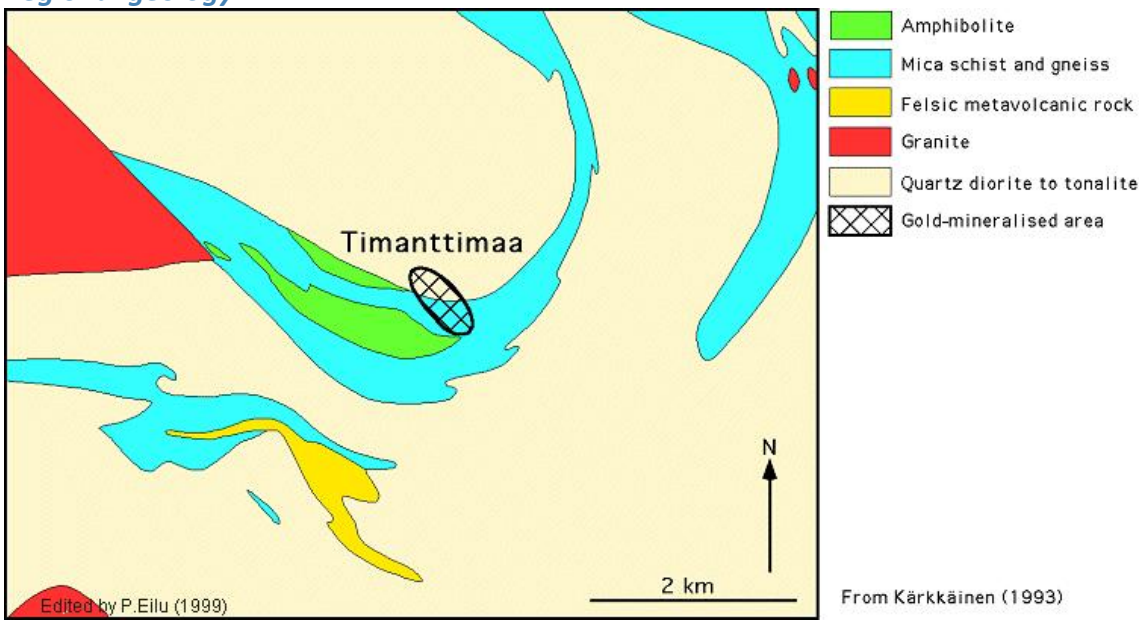


Diamond drilling at Timanttimaa, in the area of auriferous quartz veins. After Kärkkäinen (1993).
Edited by P.Eilu (1999)



Log of diamond-drill hole R303, Timanttimaa.
From Kärkkäinen (1993).

Regional geology:



From Kärkkäinen (1993)

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