Pirttineva

Occurence type: occurrence

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

Easting EUREF: 412209,382
Northing EUREF: 7101199,954
Easting YKJ: 3412346
Northing YKJ: 7104175

Discovery year: 1940
Discovered by: private prospector
Province: Laivakangas (Au, Cu)
District: Vesiperä (Au, Cu, Ag)
Comments: The first indication was an outcrop sample with high Au grades; the sample was provided by a local farmer to the GTK exploration staff

References: 3, 6

Mineral deposit type

Group: Metallogenic deposit
Main type: Metamorphic hydrothermal
References: 6, 13

Dimension

Expression: exposed
Form: NA
Shape: NA
Length (m): 300
Width (m): 200
Thickness (m): NA
Depth (m): NA
Area (ha): NA
Dip azim: 315
Dip: NA
Plunge azim: NA
Plunge dip: NA
Orientation method: NA

Holder history

Current holder: Lakeuden Malmi Oy
Years: 2021-2025
Holding type: Exploration permit

Previous holders:

Company	Years	Holding type	Comments
Geological Survey of Finland	NA	Claim (old law)	NA
Nordic Mines AB	2013-2014	Reservation	NA

EXPLORATION ACTIVITY

Northgold AB

Years	Activity type	Geologist	Exploration result	Ref
2022	detailed geology	NA	key geological features	7
	Structural analysis of the bedrock			

2022	detailed geophysics	NA	geophysical anomaly	7
	Ground IP survey with structural analysis indicated several drill targets			

2022	core drilling	Hannu Makkonen	key geological features	8, 9
	2022: 5 diamond-drill holes, in total 695 m. "The sheared sulphide-bearing zones roughly coincided with the targeted IP geophysical anomalies, but the intercepted sulphide-bearing zones tended to be rich in pyrrhotite and poor in other sulfide minerals, containing only low-concentrations of gold, with maximum grades ranging from 0.03 to 0.56 g/t Au across the five drill holes."			

Geological Survey of Finland

Years	Activity type	Geologist	Exploration result	Ref
1999-2001	detailed geochemistry	P. Lestinen	NA	6
	Detailed geochemistry in 1999-2001 (by percussion drilling); As, Bi and Sb best correlate with Au and form distinct anomalies; regionally, Au and As have a positive correlation (but not in a local scale); the As, Bi and Te anomalies extend >1 km from the Au mineralisation; in addition, there is an Sb anomaly of minor extent in till.			

1985-1991	detailed geology	Esko Sipilä, Kaj Västi	NA	6, 13, 14

1985-1991	detailed geochemistry	Esko Sipilä, Kaj Västi	NA	6
	As, Bi and Sb best correlate with Au and form distinct anomalies; regionally, Au and As have a positive correlation (but not in a local scale); the As, Bi and Te anomalies extend >1 km from the Au mineralisation; in addition, there is an Sb anomaly of minor extent in till.			

1985-1991	percussion drilling	Esko Sipilä, Kaj Västi	NA	6, 13, 14

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			

1956-1957	core drilling	NA	NA	5
	Core drilling (reconnaissance drilling): 24 diamond-drill holes, total 2000 m.			

1955-1957	detailed geophysics	NA	NA	6
	The occurrence is in northern margin of a positive magnetic anomaly .			

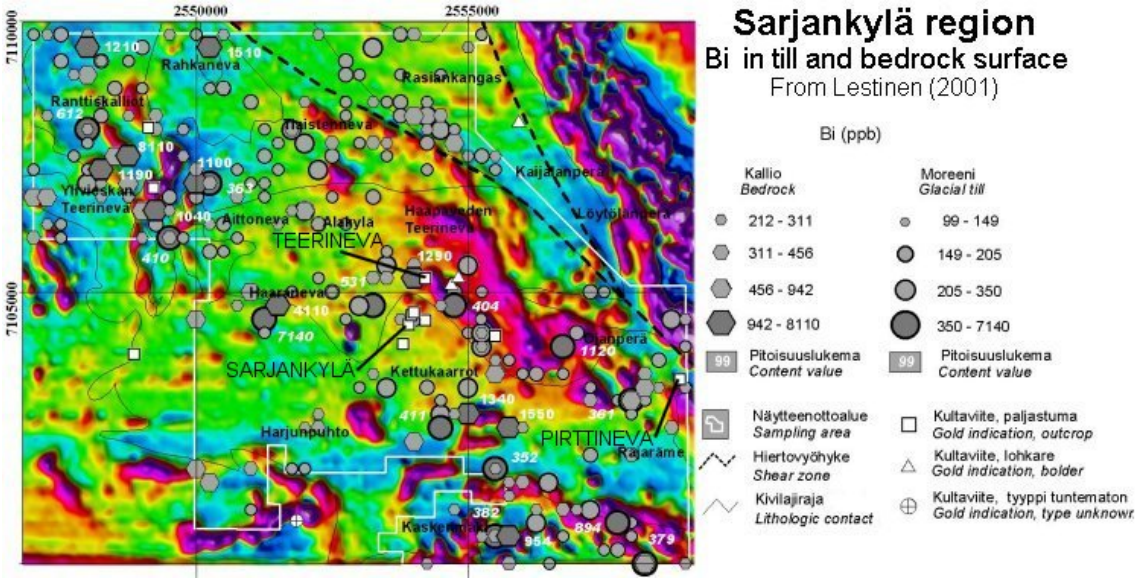
1955-1957	excavation	NA	NA	1, 2, 6, 10, 11, 12, 13

1939-1940	excavation	Antti Enkovaara, Pentti Ervamaa	NA	1, 2, 6, 10, 11, 12, 13

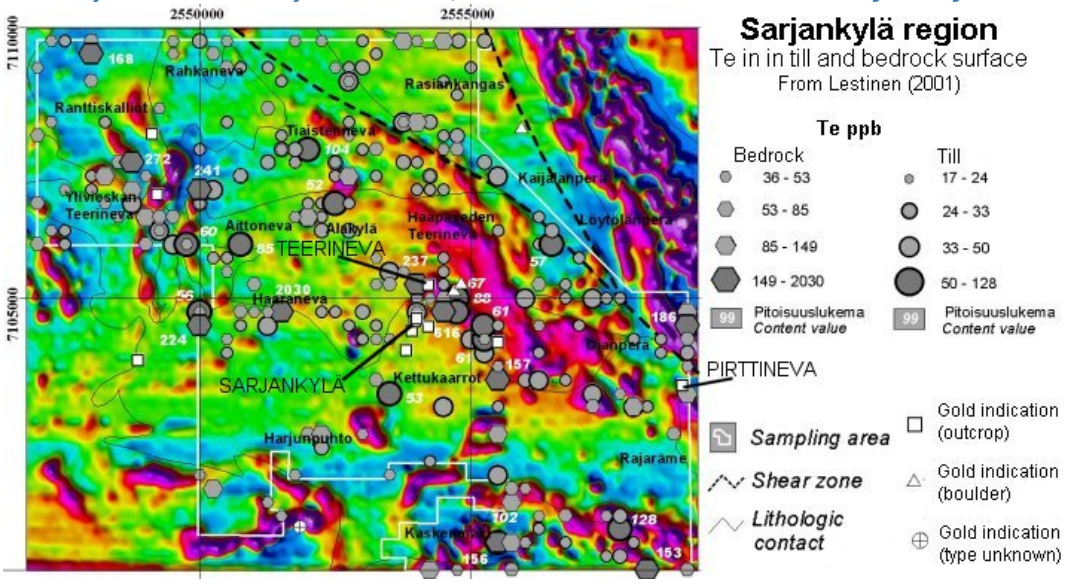
1939-1940	detailed geology	Antti Enkovaara, Pentti Ervamaa	NA	
	First indication was an outcrop sample with high Au grades provided by a local farmer to the GTK exploration staff.			

Figures

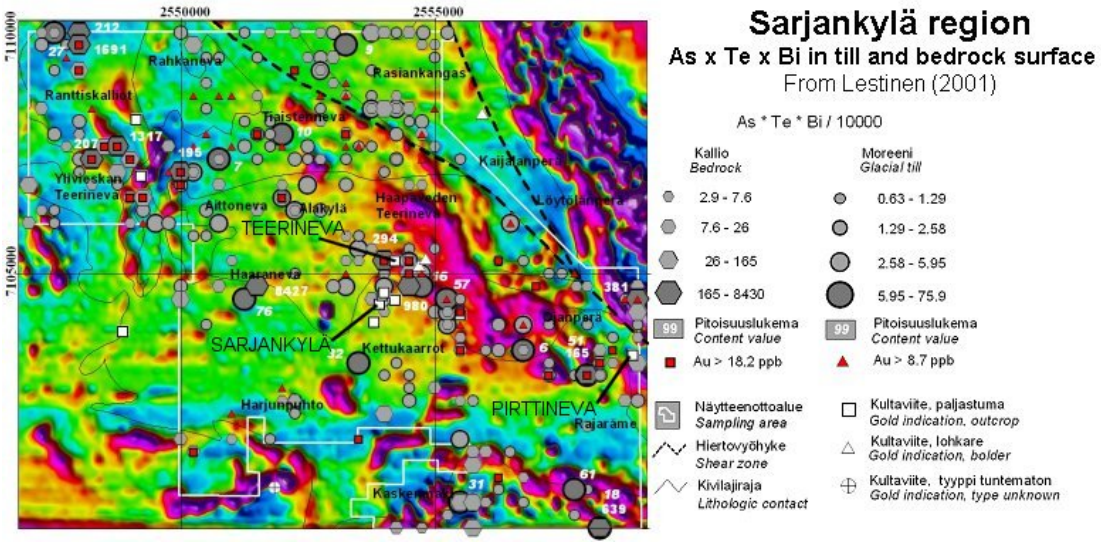
Primary and secondary anomalies; Bi content in till and at the surface of bedrock:



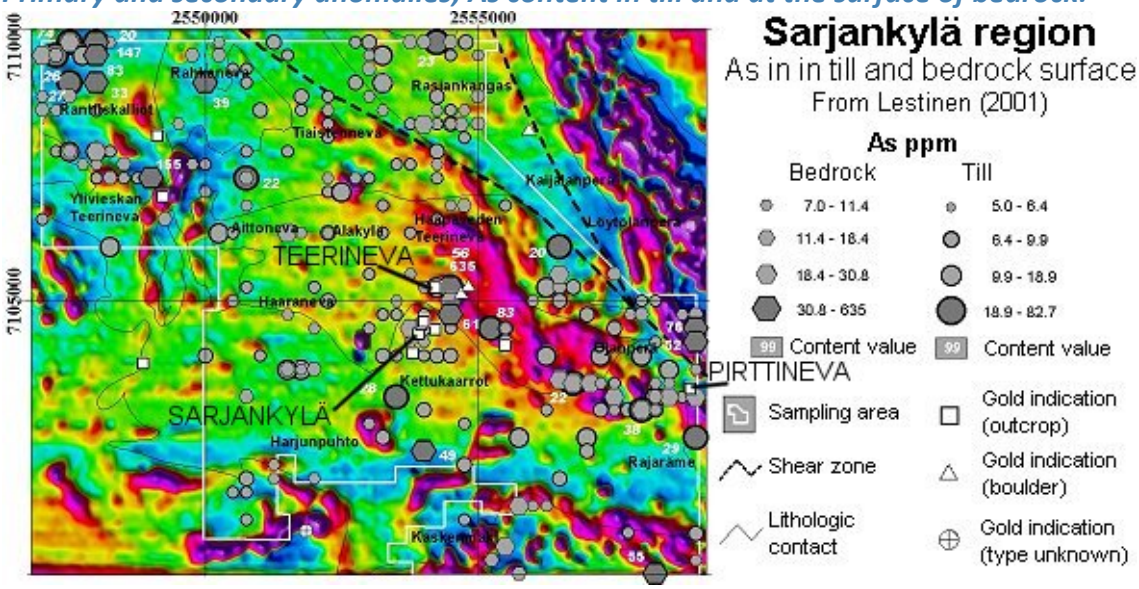
Primary and secondary anomalies; Te content in till and at the surface of bedrock:



Primary and secondary anomalies; As, Te and Bi in till and at the surface of bedrock:



Primary and secondary anomalies; As content in till and at the surface of bedrock:



GEOLOGY

Host rock: Plagioclase porphyrite, Intermediate volcanic rock, Mica schist, Granite

Plagioclase porphyrite (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 2, 13
Comments: Auriferous, 5-15 cm wide, arsenopyrite-bearing quartz veins in all host rocks trending in NW-SE and NNE-SSW

Metamorphic description:

Other minerals:

Mineral	Proportion	Mineral texture
Plagioclase	present	

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)	1900-2000		N

Intermediate volcanic rock (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 2, 4, 6, 13

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)	1900-2000		N

Mica schist (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 2, 4, 6, 13
Comments: The >100 km long, NW-trending, Ruhaperä Shear Zone is <0.5 km to the north of the occurrence

Metamorphic description:
Ore minerals:

Mineral	Proportion	Mineral texture
Arsenopyrite	major	
Gold	present	
Löllingite	minor	
Pyrite	major	
Pyrrhotite	major	

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)	1900-2000		N

Granite (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 2, 10, 11, 13

Metamorphic description:

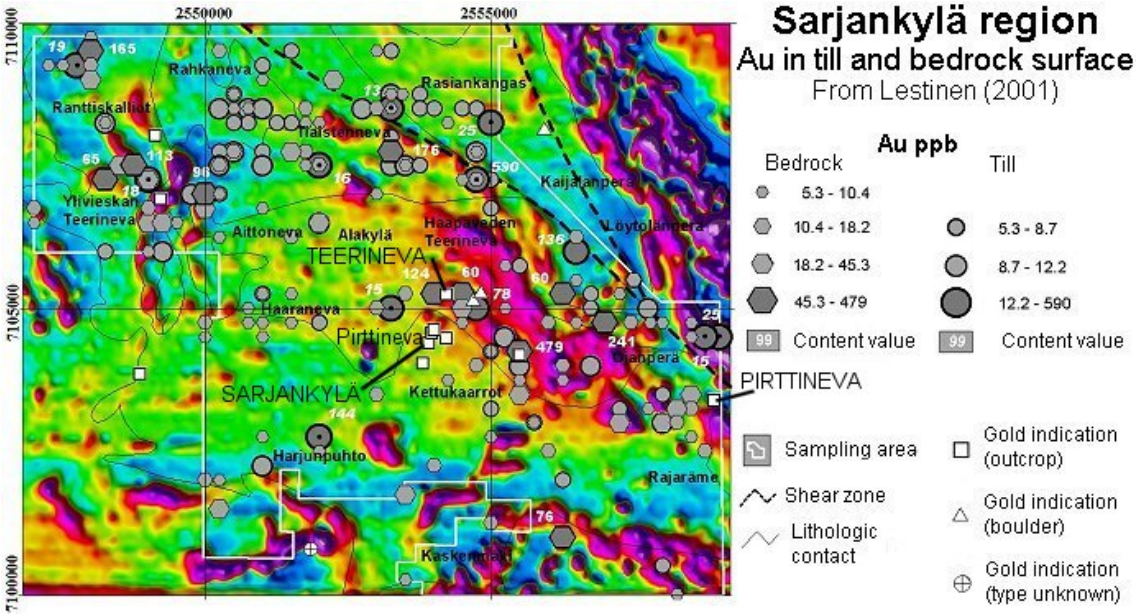
Type:	Facies:	Degree:	Relation to mineralization:	Min P- Max P (kbar)	MIn T- Max T (°C)
Regional	amphibolite metamorphic facies	medium metamorphic grade	NA		

Geological age:

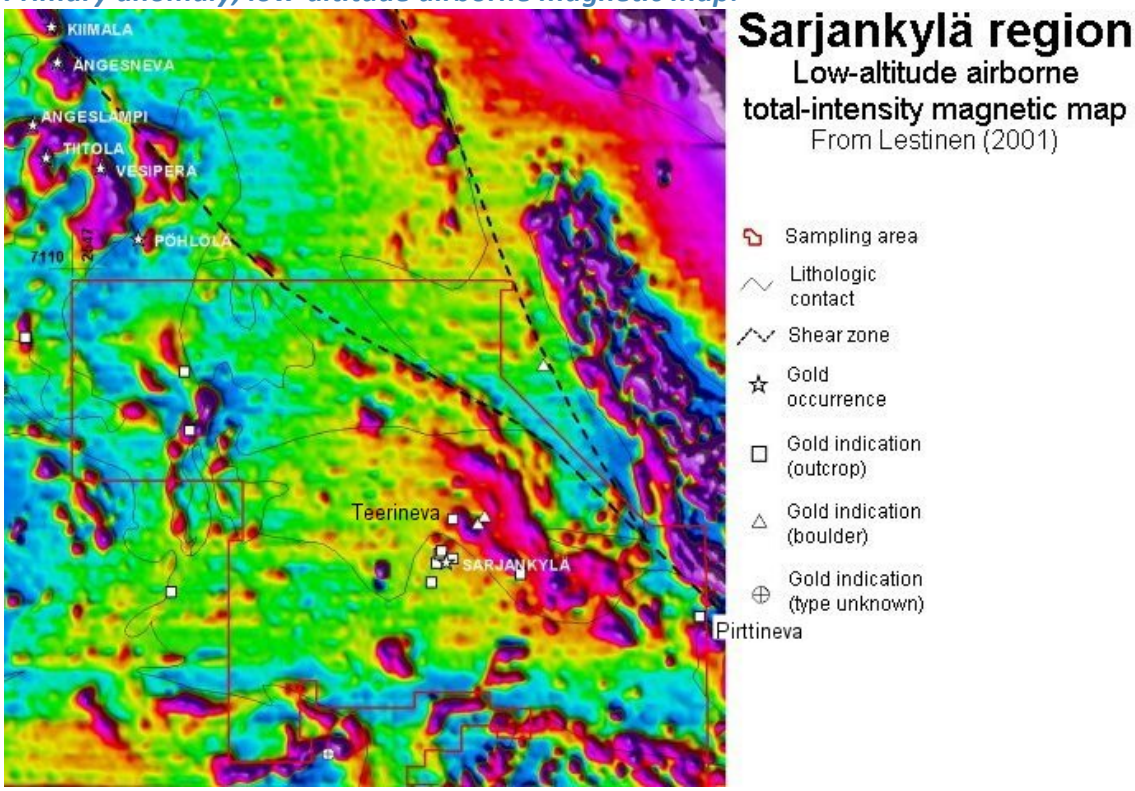
Geological era:	Max age - Minage (Ma):	Inferred age (Ma):	Age of mineralization:
Paleoproterozoic (2500-1600 Ma)	1900-2000		N

Figures

Primary and secondary anomalies; Au content in till and at the surface of bedrock:



Primary anomaly; low-altitude airborne magnetic map:



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