Ritovuori

Alternative Names: Sarvilampi
Occurence type: prospect

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

Easting EUREF: 428757,163
Northing EUREF: 7025555,537

Easting YKJ: 3428900
Northing YKJ: 7028500

Discovery year: 1958
Discovered by: Geological Survey of Finland
Province: Laivakangas (Au, Cu)
References: 1, 2, 4

Mineral deposit type

Group: Metallogenic deposit
Main type: Orogenic (metamorphic hydrothermal)
Comments: Early, granitoid-related gold mineralisation with tourmalinisation: fluids from the local syn-orogenic granodiorite(s); this is overprinted by arsenopyrite-bearing quartz veins (tourmaline detected as inlusions in arsenopyrite) which, possibly, remobilised and concentrated gold during the late stages of deformation.
References: 3, 6

Dimension

Expression: exposed
Form: discordant
Shape: NA
Length (m): 1000
Width (m): 200
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: Northern Aspect Resources Oy
Years: 2022-2023
Holding type: Reservation

Previous holders:

Company	Years	Holding type	Comments
Mineral Exploration Network (Finland) Limited	2011-2011	Claim reservation (old law)	NA
Geological Survey of Finland	1982-1986	NA	NA
Geological Survey of Finland	1965-1972	NA	NA

Geological Survey of Finland	1958-1959	NA	NA

EXPLORATION ACTIVITY

Geological Survey of Finland

Years	Activity type	Geologist	Exploration result	Ref
1999-2000	excavation	J. Nikander	NA	3, 5, 6
1999-2000	core drilling	J. Nikander	NA	3, 5, 6
1999-2000	detailed geology	J. Nikander	NA	3, 5, 6
1999-2000	detailed geophysics	J. Nikander	NA	3, 5, 6
1999-2000	detailed geochemistry	J. Nikander	NA	5
	Extensive As-Au-Bi-Cu-Sb anomaly in till.			
1982-1986	detailed geophysics	J. Nikander	NA	3, 5, 6
1982-1986	core drilling	J. Nikander	NA	3, 5, 6
1982-1986	excavation	J. Nikander	NA	3, 5, 6
1982-1986	detailed geology	J. Nikander	NA	3, 5, 6
1982-1986	detailed geochemistry	J. Nikander	NA	5
	Extensive As-Au-Bi-Cu-Sb anomaly in till.			
1980-1980	regional geophysics	J. Nikander	key geological features	
	Low-altitude airborne magnetic, electromagnetic and radiometric survey			
1965-1972	detailed geology	Lea Aho	key geological features	1, 2
1958-1959	detailed geology	A.J. Laitakari	NA	1, 2, 6
	Glacial erratic boulders led to the discovery of the mineralisation in outcrop.			
1958-1959	core drilling	A.J. Laitakari	NA	1, 6
	Core drilling (reconnaissance drilling): 10 diamond-drill holes, total about 500 m.			
	Intersections			
	HoleID	NA		
	From-To	NA		
	Length	1,3m		
	gold	3ppm		
	HoleID	NA		
	From-To	NA		
	Length	0,6m		
	gold	22ppm		
	HoleID	NA		
	From-To	NA		
	Length	1,1m		
	gold	2ppm		

GEOLOGY

Host rock: Mafic volcanic rock, Quartz vein, Felsic volcanic rock, Intermediate volcanic rock

Mafic volcanic rock (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 1, 2, 3, 6

Ore minerals:

Mineral	Proportion	Mineral texture
Arsenopyrite	major	
Chalcopyrite	minor	
Gold	minor	
	Only native gold which dominantly occurs in fractures of and between arsenopyrite grains, some gold as inclusions in pyrite.	
Löllingite	minor	
Marcasite	minor	
Pyrite	minor	
Pyrrhotite	minor	
Rutile	minor	
Sphalerite	minor	

Other minerals:

Mineral	Proportion	Mineral texture
Biotite	present	Alteration product
Plagioclase	present	Alteration product
Quartz	present	
Scheelite	present	
Tourmaline	present	

Alteration:	Distribution:	Degree:	Relation to mineralization:
tourmalinisation	Pervasive	Strong	NA
Comments: It is unclear if this actually is related to the early gold mineralisation, which is overprinted by the vein-gold mineralisation.			
chloritic alteration	NA	NA	NA
sericitic alteration	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: Plagioclase (An30-40)-hornblende-biotite-quartz-epidote-titanite-magnetite-chlorite-apatite.					

Quartz vein (Host rock)

Rock type: Host rock
Proportion: minor

Grain size: NA
Color: NA
References: 1, 2, 3, 6
Comments: Auriferous, arsenopyrite-bearing quartz veins

Felsic volcanic rock (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 1, 2, 3, 6

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		

Intermediate volcanic rock (Host rock)

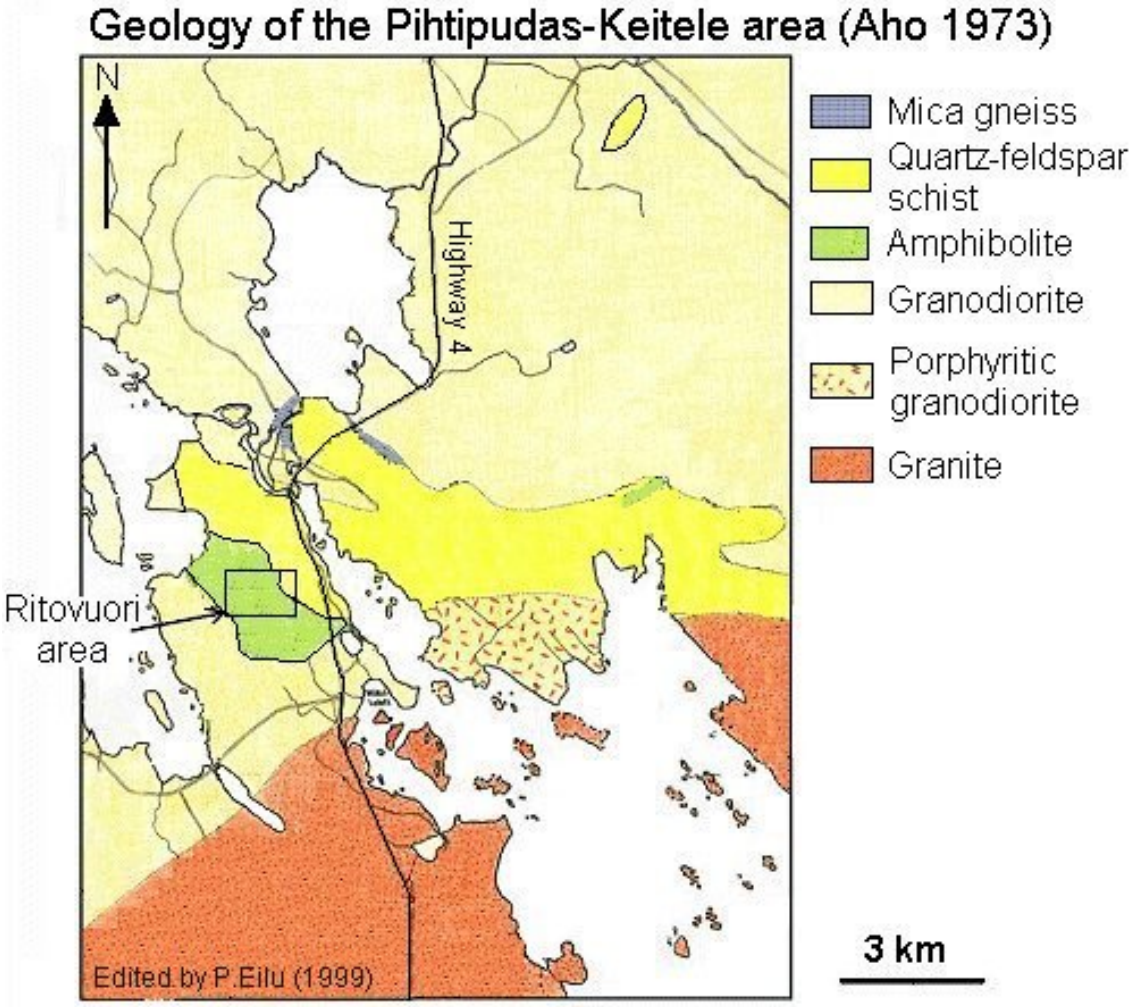
Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 1, 2, 3, 6

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		

Figures

Regional geology:

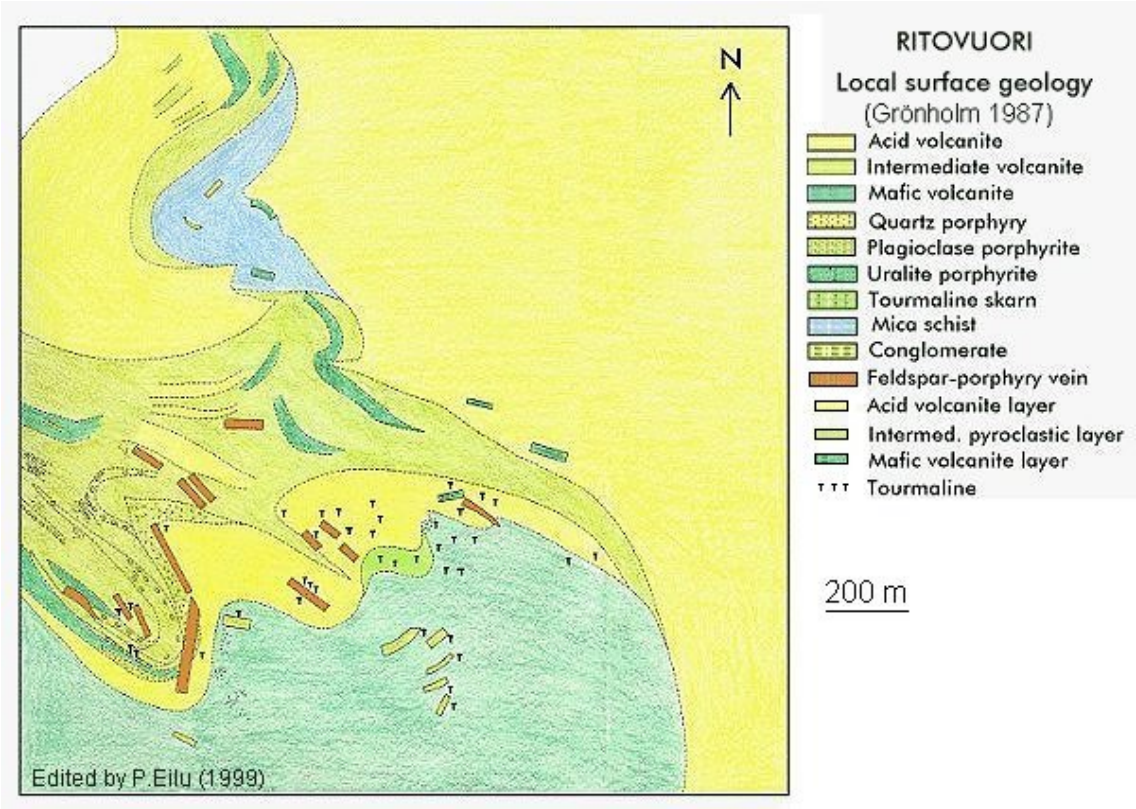


Structure:

Acid volcanic rock with tourmaline in Ritovuori, Pihtipudas. Notice the agglomerate-like layer in the middle. Observation site SSG-83-88, x=7028,73, y=428,74. Diameter of the lens cap ca. 6 cm.

(from Grönholm 1987)

Local geology:



Vein:

Tourmaline-quartz veins in acid volcanite in Ritovuori, Pihtipudas. Observation site SSG-83-92, x=7028,672, y=428,752. Diameter of the lens cap is ca. 6 cm.

(from Grönholm 1987)

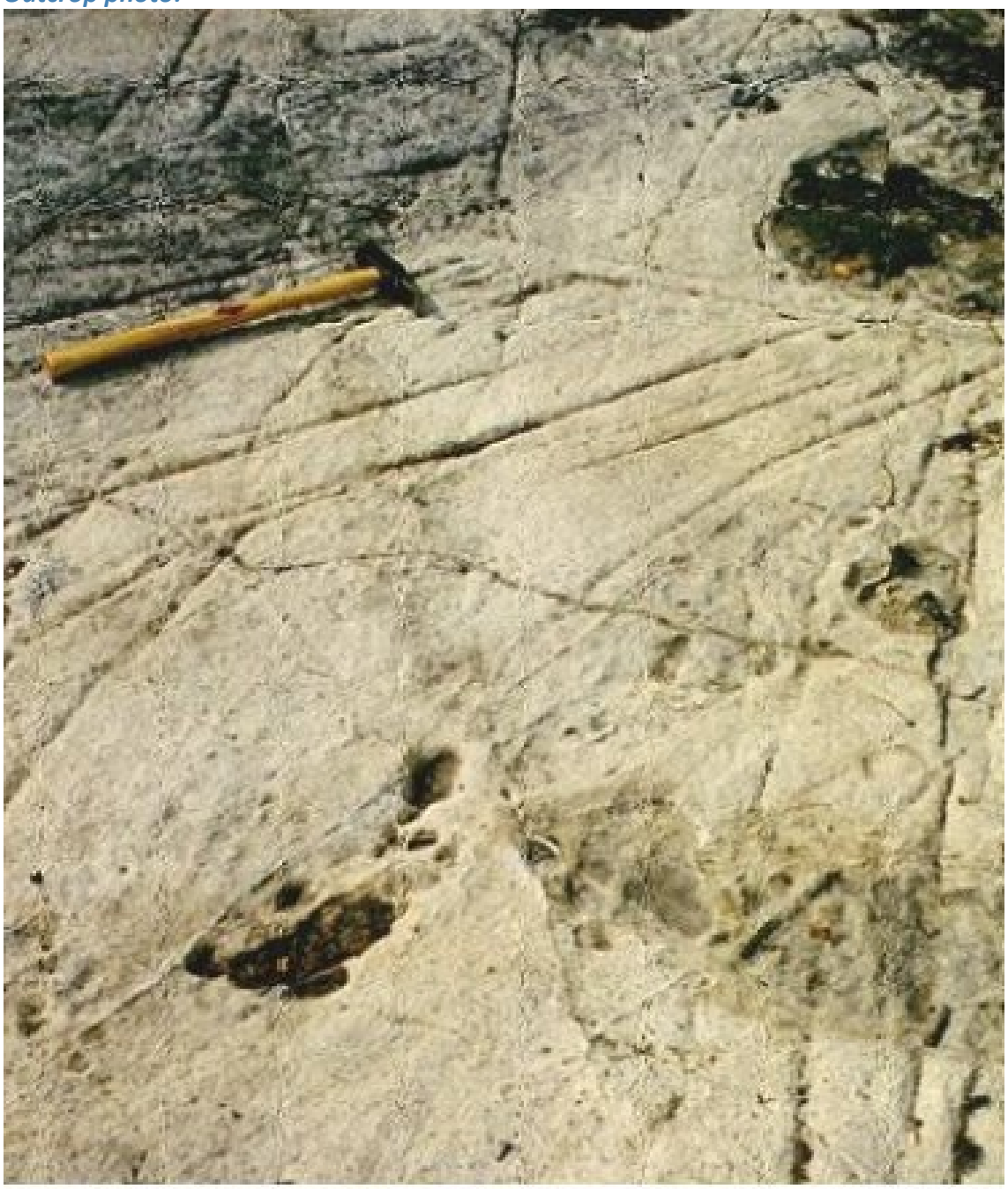
Vein:

Tourmaline veins (black) in felsic metavolcanic rock at Ritovuori. Hammer handle is 70 cm. (Grönholm 1987).

Very fine-grained tourmaline and tourmaline needles in a tourmaline-quartz vein, Ritovuori, Pihtipudas. Sample from the observation site SSG-83-94, x=7028,696, y=428,856. Crossed polarizers.

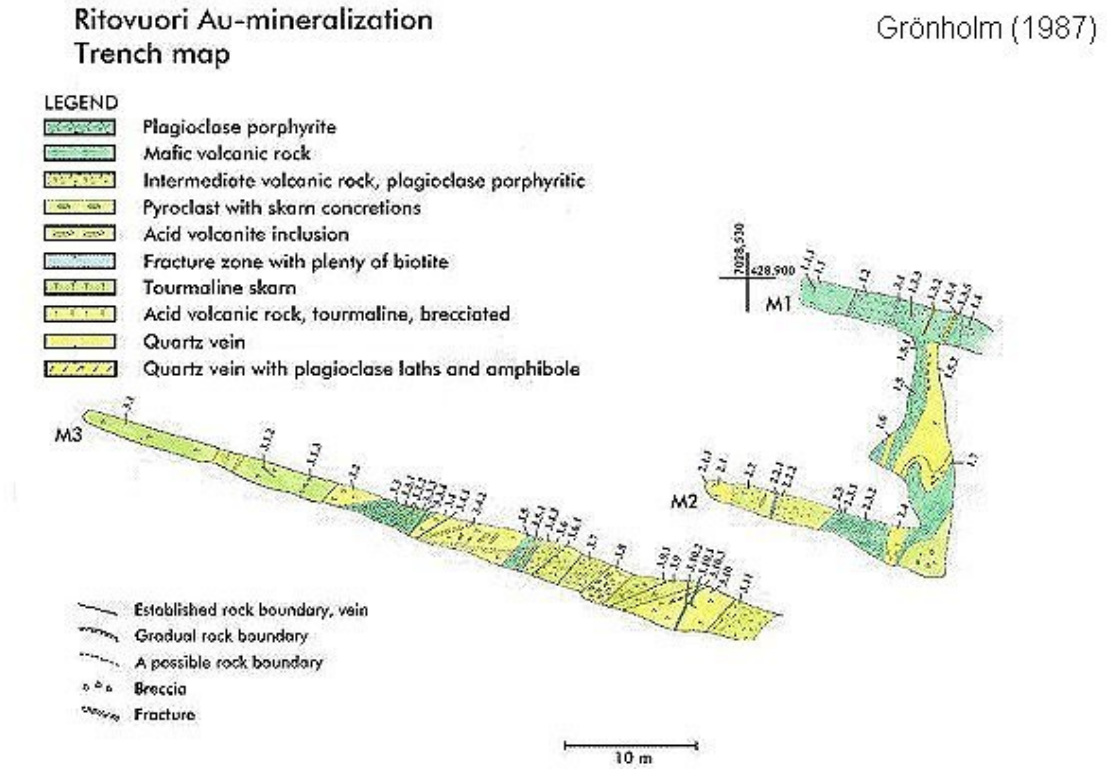
(from Grönholm 1987)

Outcrop photo:



Tourmaline-bearing felsic metavolcanic rock from Ritovuori, Pihtipudas.A diopside-tourmaline-rich band beyond the hammer. The handle of the hammer is about 60 cm long. From Grönholm (1987).

Trench:



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