Roninlampi

Alternative Names: Pahasuo 2
Occurence type: deposit

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

Easting EUREF: 612928,088
Northing EUREF: 7108406,148
Easting YKJ: 3613146
Northing YKJ: 7111383

Discovery year: 2001
Discovered by: Geological Survey of Finland
Province: Kuhmo (Ni, Ag, Au)
Comments: The frst indications were Au-anomalies in till detected in regional geochemical exploration campaign in 1990s: Auriferous glacial erratics and outrcops were detected during regional exploration in 2001-2002.
References: 3, 4, 5

Mineral deposit type

Group: Metallogenic deposit
Main type: Orogenic (metamorphic hydrothermal)
References: 1

Dimension

Expression: exposed
Form: NA
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
Dimension comments: Extent not reported. NW-trending veining

Holder history

Previous holders:

Company	Years	Holding type	Comments
Sotkamo Silver Oy	2020	Reservation	NA
Mineral Exploration Network (Finland) Limited	2014	Exploration permit	NA
Magnus Minerals Oy	2010-2013	Claim (old law)	NA
Magnus Minerals Oy	2007	NA	NA
Geological Survey of Finland	2001	NA	NA

EXPLORATION ACTIVITY

Mineral Exploration Network (Finland) Limited

Years	Activity type	Geologist	Exploration result	Ref
2012-2013	detailed geochemistry	NA	geochemical anomaly	3
	Several As anomalies were localised by soil sampling program in 2012. Till sampling and ground magnetic survey were planned for 2013 field season			

Geological Survey of Finland

Years	Activity type	Geologist	Exploration result	Ref
2003-2003	core drilling	Aimo Hartikainen	mineral occurrences	1, 4
	Core drilling (reconnaissance drilling): seven diamond-drill holes, total 495 m .			
	Intersections			
	HoleID	R313		
	From-To	23,9-25,9		
	Length	2m		
	gold	1,35ppm		
	HoleID	R316		
	From-To	79,2-80,2		
	Length	1m		
	gold	1,88ppm		
	HoleID	R318		
	From-To	45,5-46,5		
	Length	1m		
	gold	3,62ppm		

2001-2003	detailed geology	Aimo Hartikainen	mineral occurrences	1, 2, 4
	Auriferous glacial erratics and outrcops were detected during regional exploration.			

2001-2003	detailed geochemistry	Aimo Hartikainen	geochemical anomaly	1, 2, 4

1990-1990	detailed geology	Aimo Hartikainen	key geological features	1, 2, 4

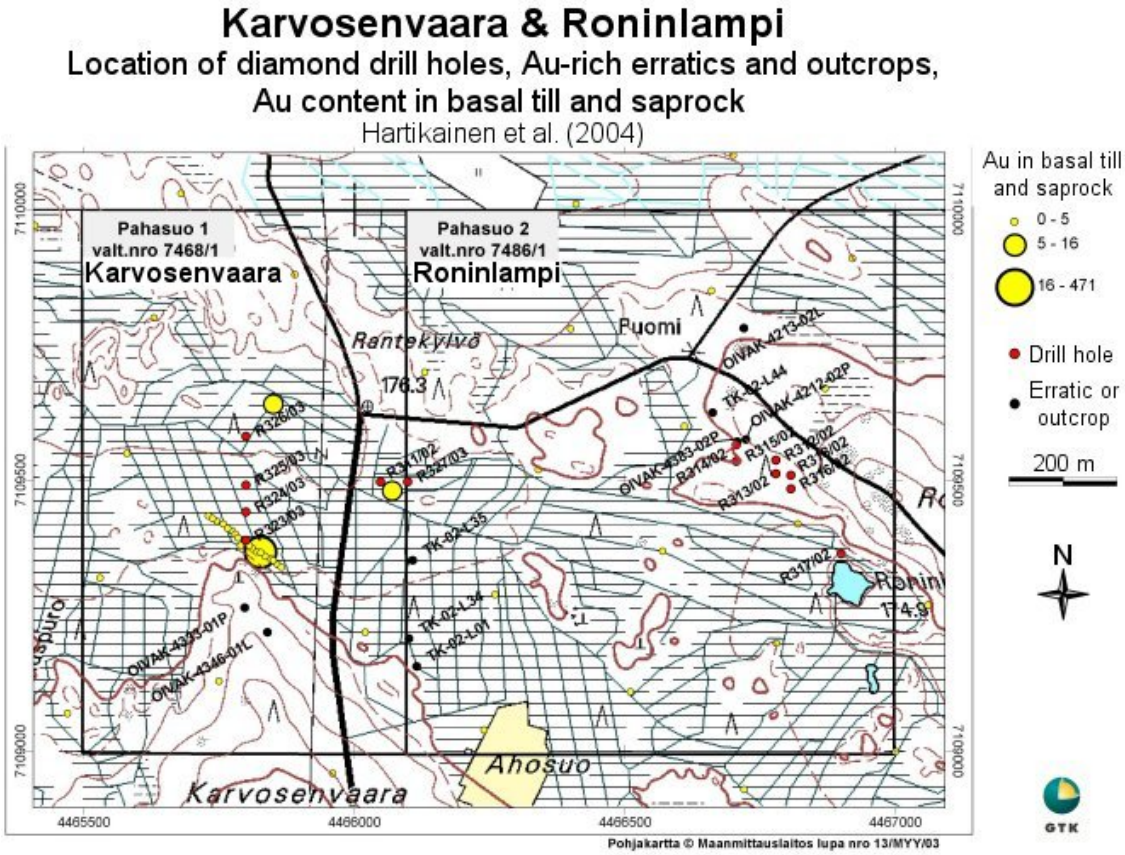
1990-2001	regional geochemistry	Markku Tenhola	geochemical anomaly	1, 2, 4
	Greenstone belt-wide till-geochemical survey with 16 damples per one sq.km. First indication were Au-anomalies in till detected in regional geochemical exploration campaign.			

1988-1988	regional geochemistry	Markku Tenhola	geochemical anomaly	1, 2, 4
	Country-wide till-geochemical survey woth one sample per 4 sq.km			

1987-1987	regional geophysics	Aimo Hartikainen	key geological features	1, 2, 4
	Low-altitude airborne magnetic, electromagnetic and radiometric survey			

Figures

Karvosenvaara and Roninlampi: drill holes, Au-rich erratics and outcrops, and Au in basal till and saprock:



GEOLOGY

Host rock: Tholeiitic basalt, Quartz vein, Paraschist

Tholeiitic basalt (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 1, 2, 4

Metamorphic description:
Ore minerals:

Mineral	Proportion	Mineral texture
Arsenopyrite	major	
Chalcopyrite	minor	
Gold	minor	
Pyrrhotite	minor	
Sphalerite	minor	
Stibnite	minor	

Other minerals:

Mineral	Proportion	Mineral texture
Biotite	major	
	Alteration product	
Calcite	present	
Garnet	minor	
Hornblende	major	
Plagioclase	major	
Quartz	present	
Quartz	minor	
Scheelite	present	
Tourmaline	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		
Comments: Metamorphic mineral assemblage: Plagioclase-hornblende ± garnet.					

Geological age:

Geological era:	Max age - Minage (Ma):	Inferred age (Ma):	Age of mineralization:
Archean (4000-2500 Ma)	2500-4000		N

Quartz vein (Host rock)

Rock type: Host rock
Proportion: minor
Grain size: NA

Color: NA
References: 1, 4
Comments: Auriferous quartz and quartz-carbonate veins 0.5 cm to 2 m wide, and post-mineralisation (= barren) white quartz veins

Ore minerals:

Mineral	Proportion	Mineral texture
Arsenopyrite	rare	
Chalcopyrite	present	
Gold	trace	
Pyrite	present	
Pyrrhotite	present	
Sphalerite	rare	

Other minerals:

Mineral	Proportion	Mineral texture
Quartz	major	

Paraschist (Host rock)

Rock type: Host rock
Proportion: minor
Grain size: NA
Color: NA
References: 1, 2, 4
Comments: The local bedrock is dominated by mica schist and metavolcanic rocks

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: quartz-K feldspar-plagioclase-biotite-±garnet.					

Geological age:

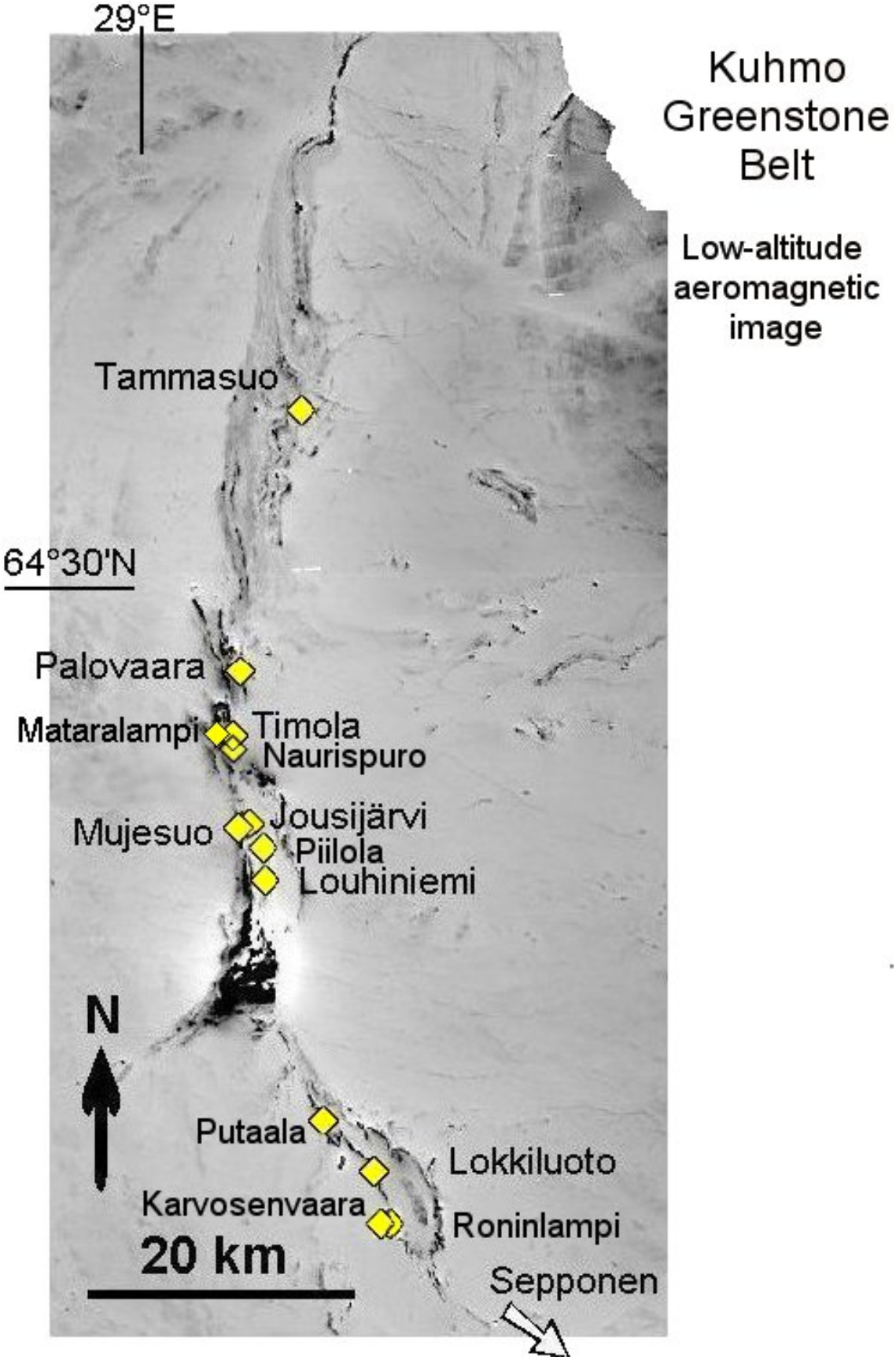
Geological era:	Max age - Minage (Ma):	Inferred age (Ma):	Age of mineralization:
Archean (4000-2500 Ma)	2500-4000		N

Figures

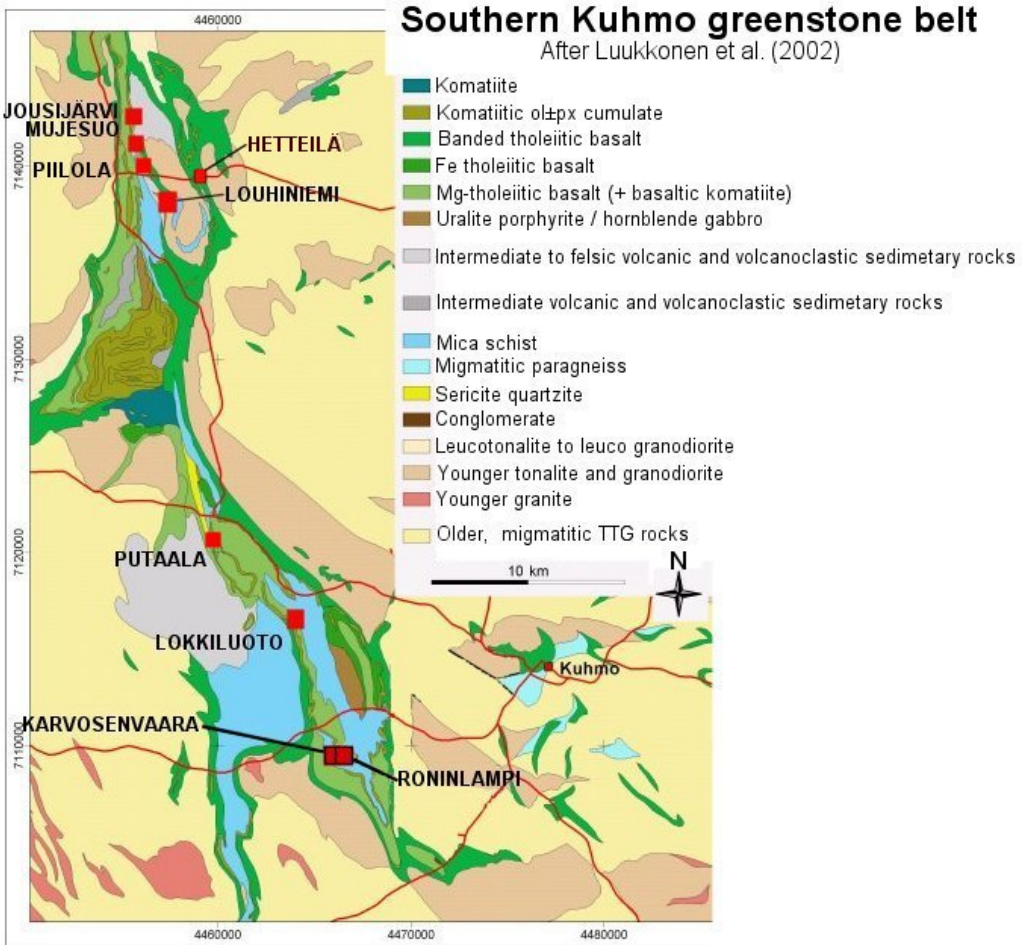
Roninlampi: mineralised outcrop photo:

Detail of the gold-mineralised mica schist outcrop OIVAK-4383-02P at Roninlampi. Sampling from a folded quartz vein which contains 572 g/t Au (Kv1). LV = early foliation, LN = late foliation, SN = late shearing. Diameter of the drill holes 31 mm.

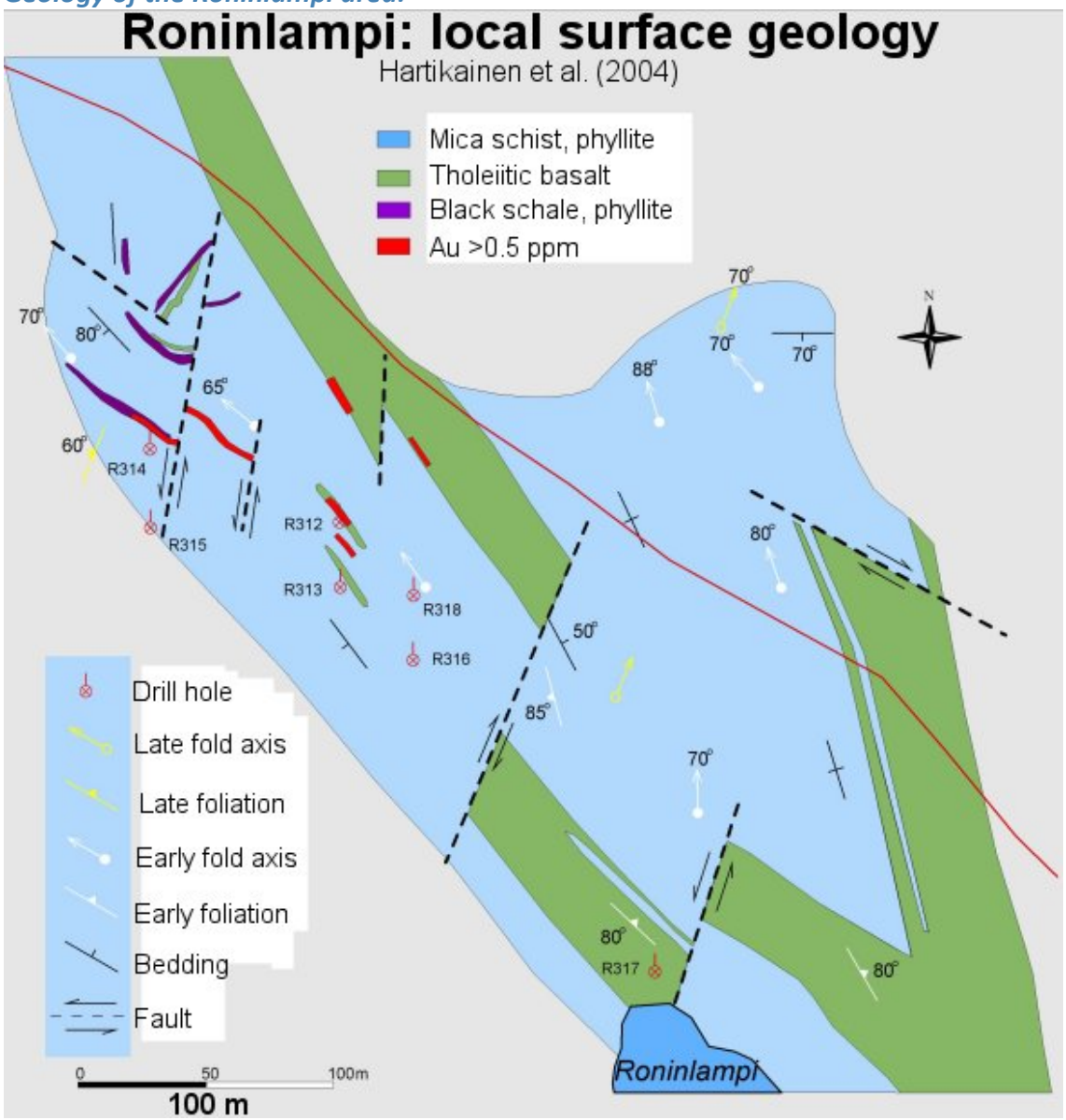
Kuhmo greenstone belt aeromagnetic image and known gold occurrences:



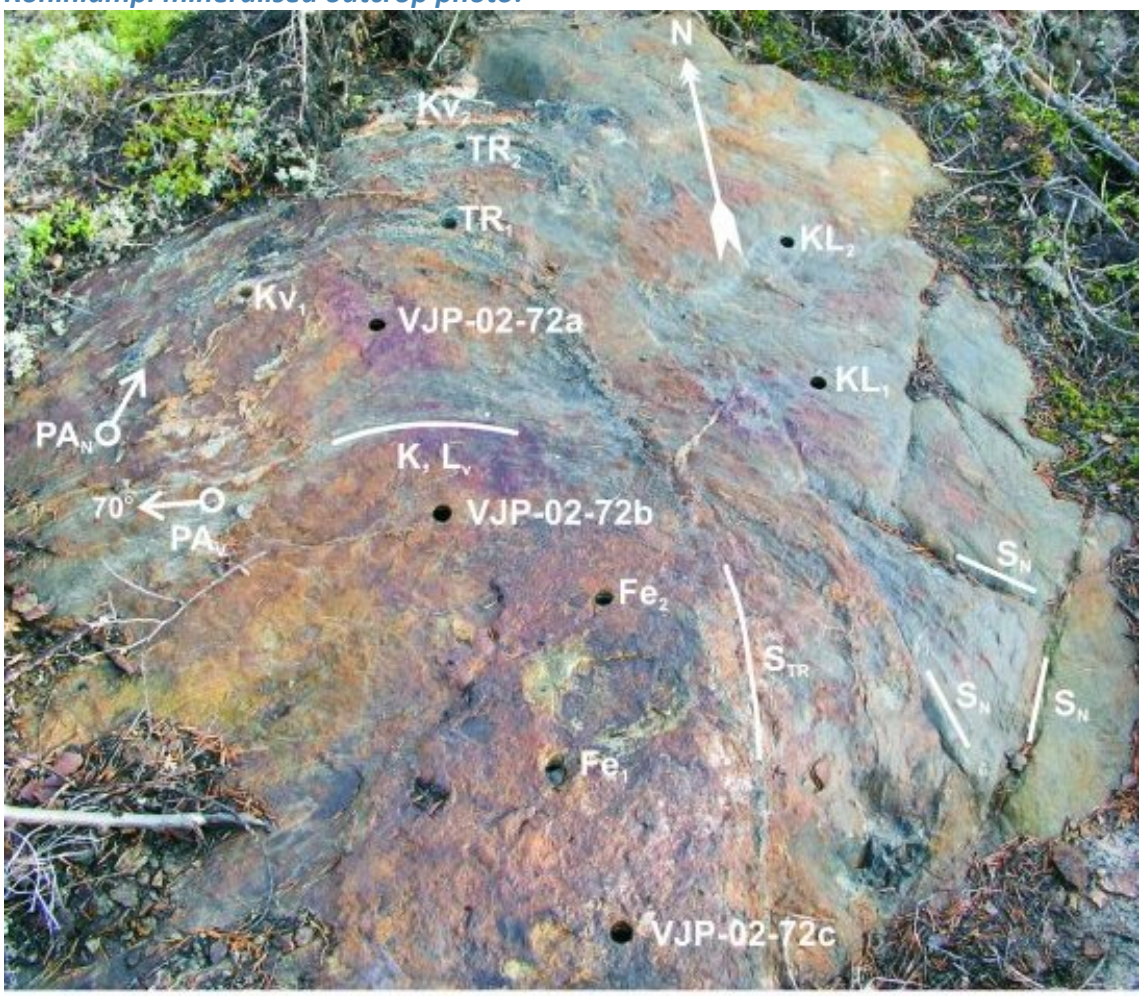
Southern Kuhmo greenstone belt geology:



Geology of the Roninlampi area:

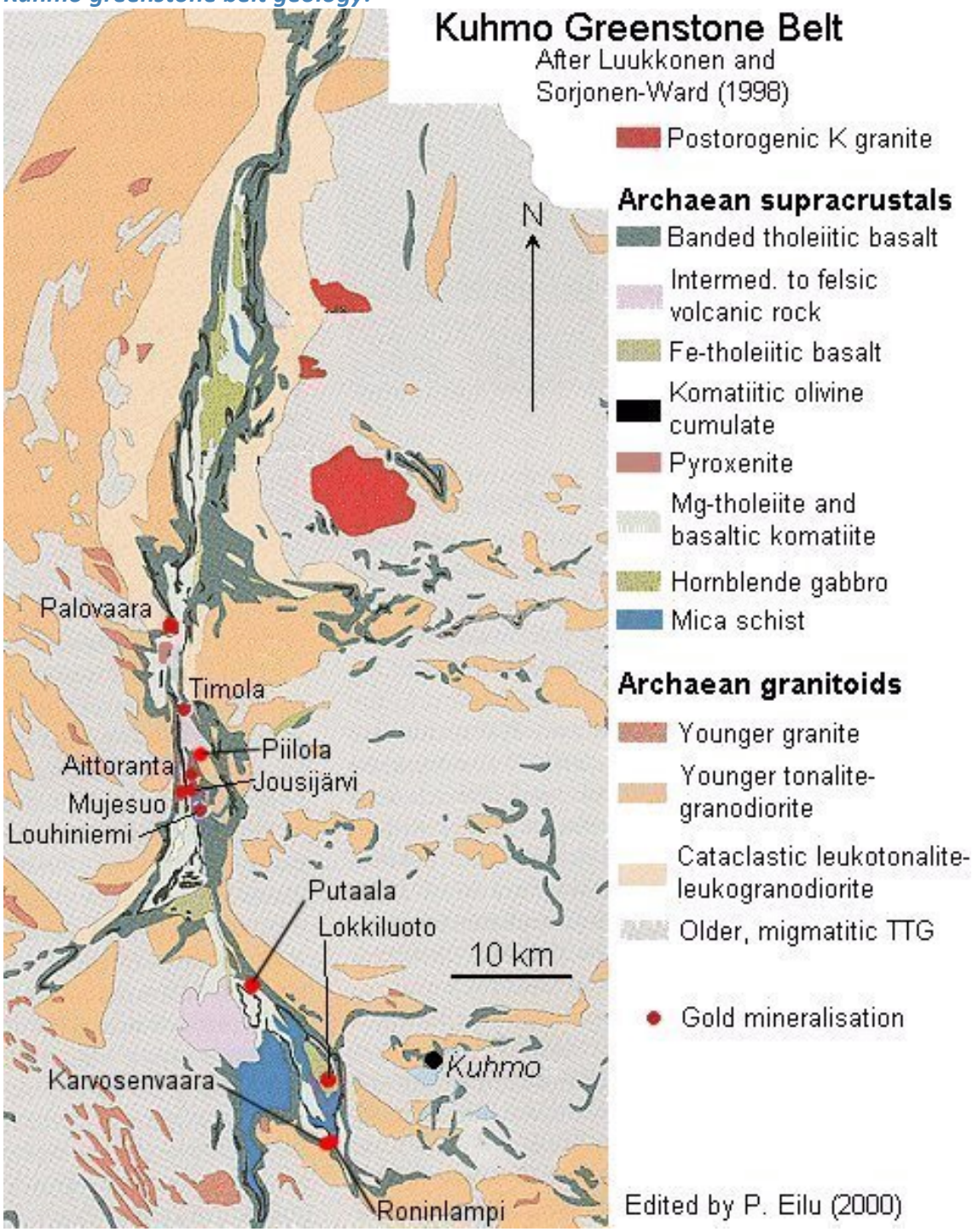


Roninlampi mineralised outcrop photo:

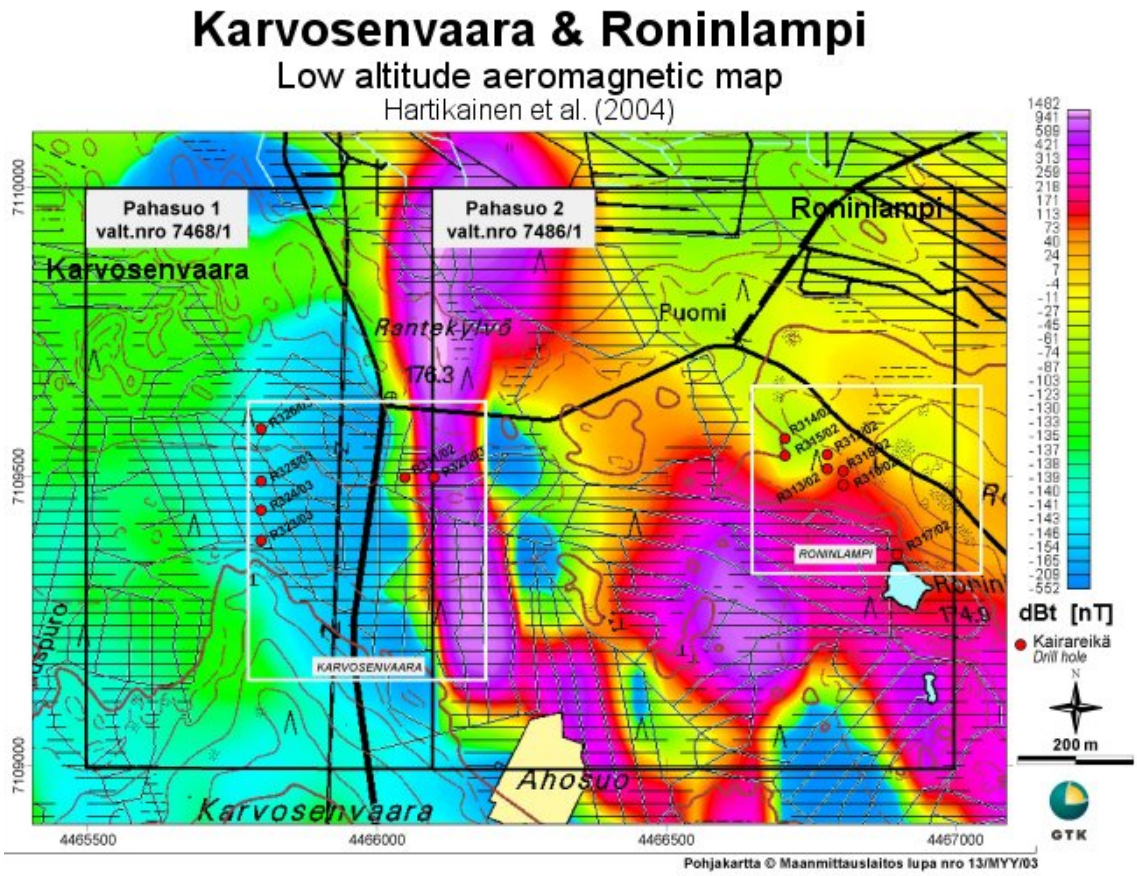


Gold-mineralised mic schist outcrop OIVAK-4383-02P at Roninlampi. Tourmaline breccia (TR) and quartz veins (Kv). PAV = early fold axis, PAN = late fold axis, SN=young shearing. Diameter of the holes 31 mm.

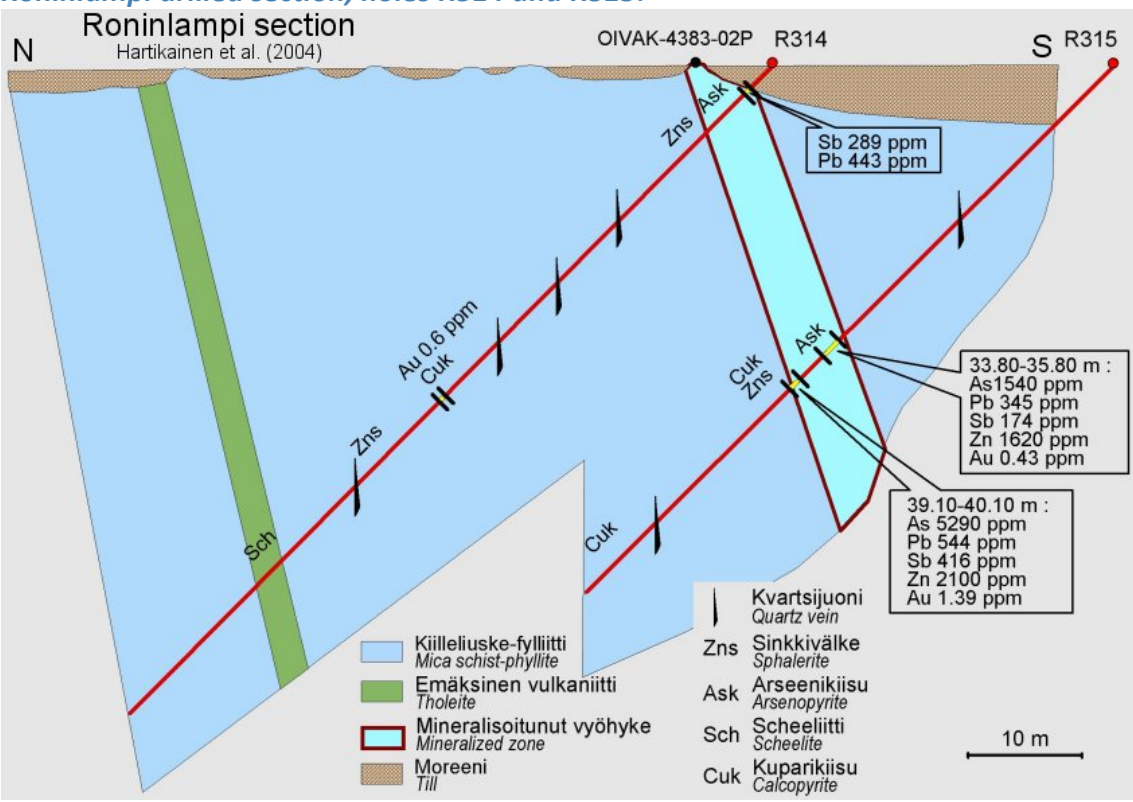
Kuhmo greenstone belt geology:



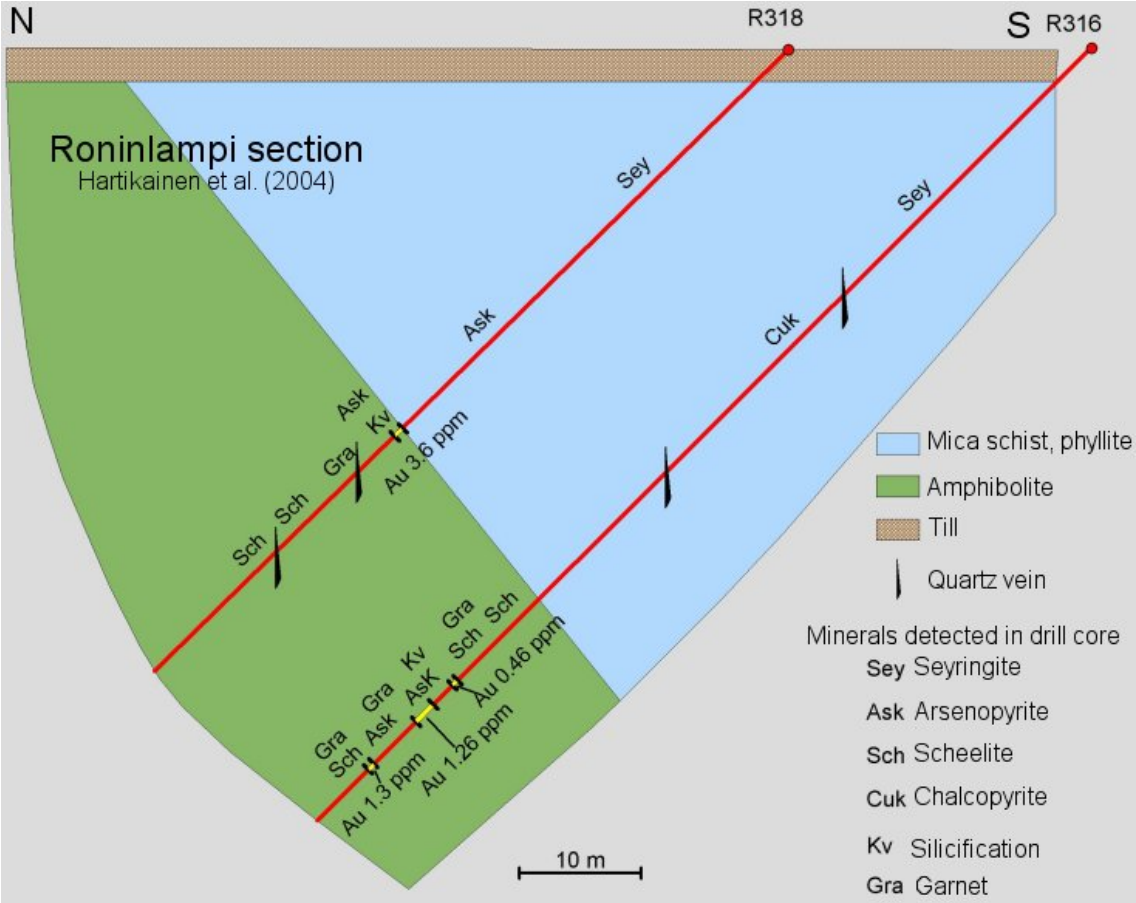
Karvosenvaara-Roninlampi area, aeromagnetic image:



Roninlampi drilled section, holes R314 and R315:



Roninlampi drilled section, holes R316 and R318 :



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