

Jousijärvi

Occurrence type: occurrence

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

Easting EUREF: 600354,051
Northing EUREF: 7140079,339

Easting YKJ: 3600567
Northing YKJ: 7143069

Discovery year: 1994
Province: Kuhmo (Ni, Ag, Au)
District: Kuhmo (Au)
References: 5, 8

Mineral deposit type

Group: Metallogenic deposit
Main type: Orogenic (metamorphic hydrothermal)
Comments: Orogenic "mesothermal" deposit formed during late-Archaean cratonisation.
References: 6

Dimension

Expression: exposed
Form: discordant
Shape: NA
Length (m): NA
Width (m): NA
Thickness (m): NA
Depth (m): NA

Area (ha): NA
Dip azimuth: NA
Dip: NA
Plunge azimuth: NA
Plunge dip: NA
Orientation method: NA

Dimension comments: Extent not known. The mineralisation is in the eastern margin of the N-trending major shear zone in the area.

Holder history

Current holder: Mineral Exploration Network (Suomi) Oy
Years: 2019-2023
Holding type: Exploration permit

Previous holders:

Company	Years	Holding type	Comments
Mineral Exploration Network (Finland) Limited	2009-2010	Claim reservation (old law)	NA
Geological Survey of Finland	2004-2005	NA	NA
Ilmari Exploration Oy	2002-2003	NA	NA
Geological Survey of Finland	1994-1999	NA	NA

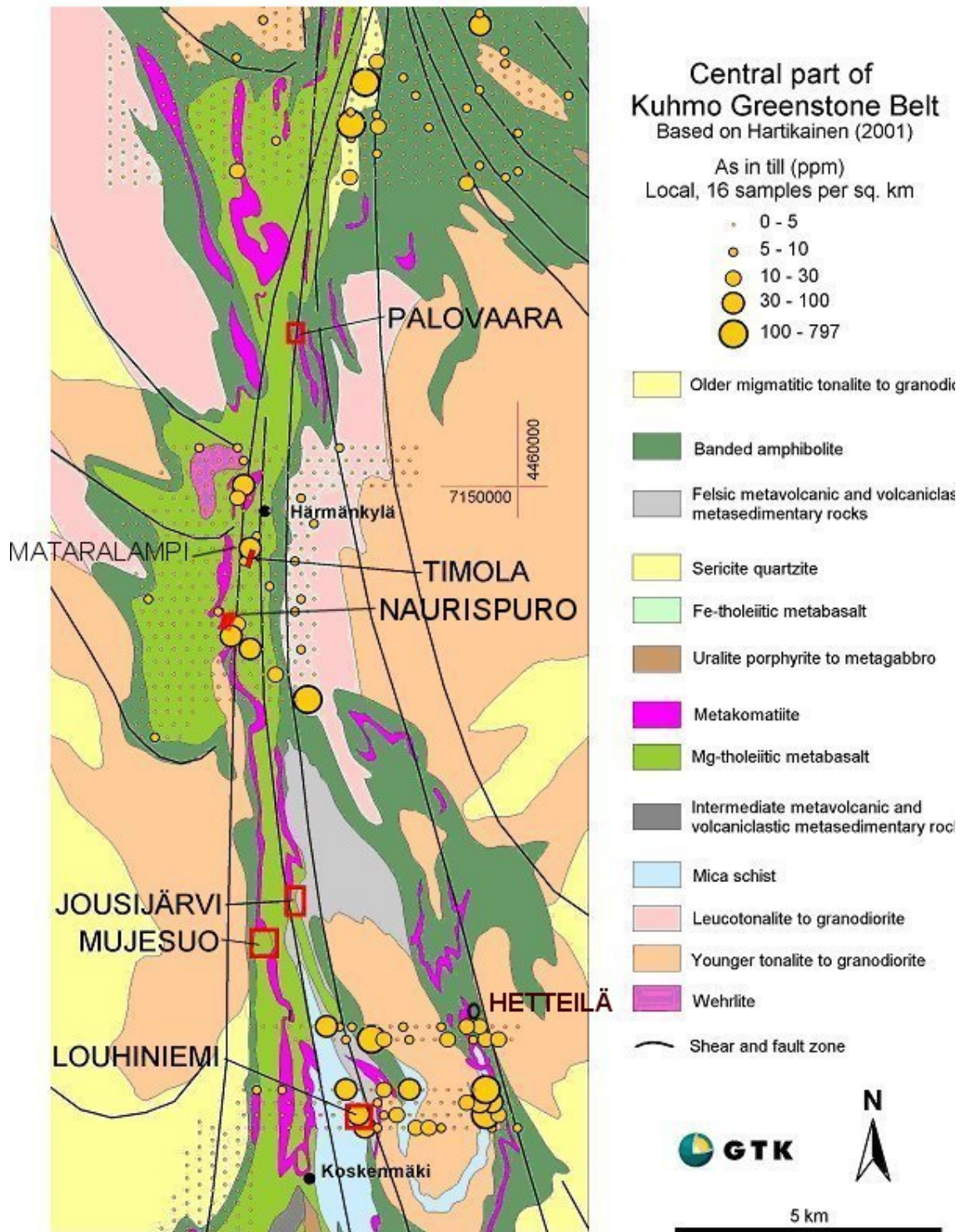
EXPLORATION ACTIVITY

Geological Survey of Finland

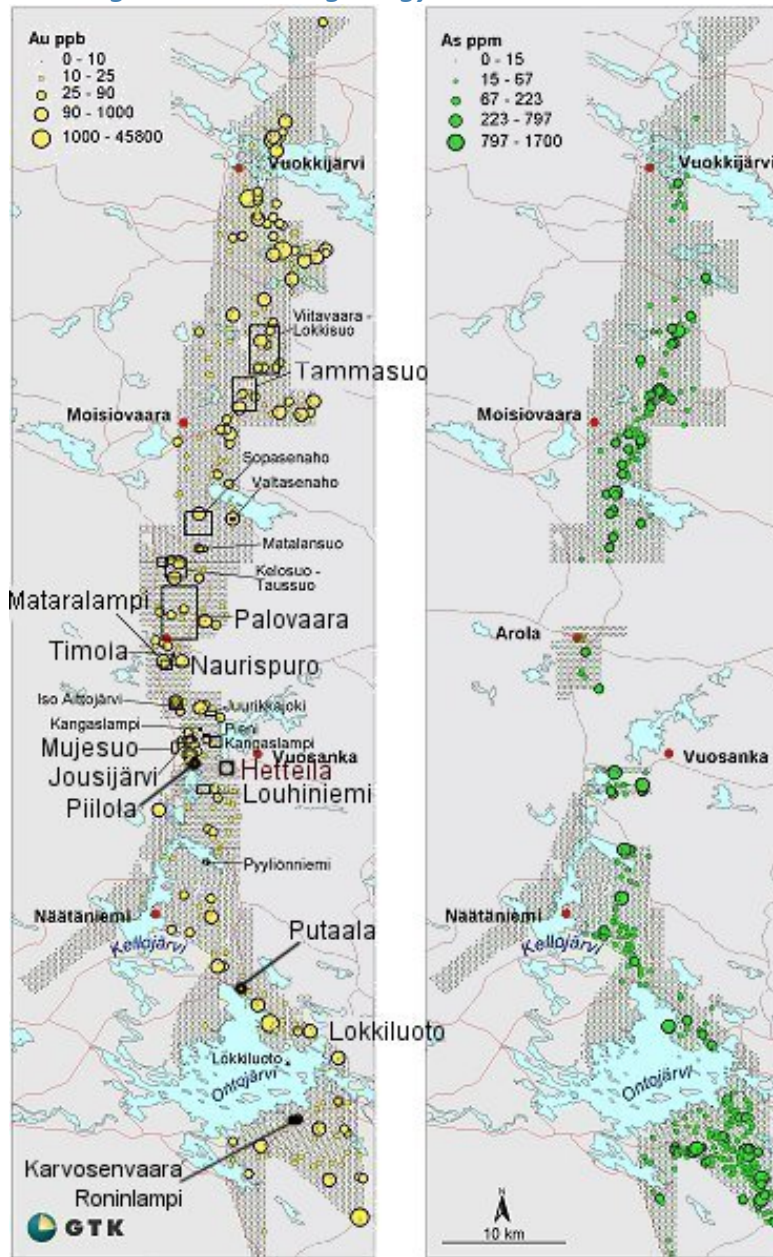
Years	Activity type	Geologist	Exploration result	Ref
1993-1996	core drilling	Erkki Luukkonen, Timo Heino	mineral occurrences	10
	<i>The mineralisation was detected by diamond drilling into bedrock covered by a local Au anomaly in till; Nine diamond-drill holes, total 382 m.</i>			
	Intersections			
	HoleID	NA		
	From-To	NA		
	Length	2,6m		
	gold	3,5ppm		
1991-1994	detailed geochemistry	Markku Tenhola	geochemical anomaly	4, 10
	<i>Regional and local Au and As anomalies in till</i>			
1991-2003	detailed geology	Erkki Luukkonen, Timo Heino	key geological features	4, 7, 10
1991-1996	detailed geophysics	Erkki Luukkonen, Timo Heino	geophysical anomaly	4, 7, 10
	<i>High-grade boulder found at and the potential extensions of magnetic and IP anomalies from the Mujesuo prospect near Jousijärvi were seen as good indicators.</i>			
1990-2001	regional geochemistry	Markku Tenhola	geochemical anomaly	
	<i>Greenstone belt-wide till-geochemical survey with 16 samples per one square kilometre</i>			
1987-1987	regional geophysics	Erkki Luukkonen, Timo Heino	key geological features	4, 7, 10
	<i>Low-altitude airborne magnetic, electromagnetic and radiometric survey</i>			
1984-1984	regional geochemistry	Markku Tenhola	geochemical anomaly	4
	<i>Country-wide till-geochemical survey</i>			

Figures

Central Kuhmo greenstone belt geology and As in till:



Kuhmo greenstone belt geology and Au and As in till:



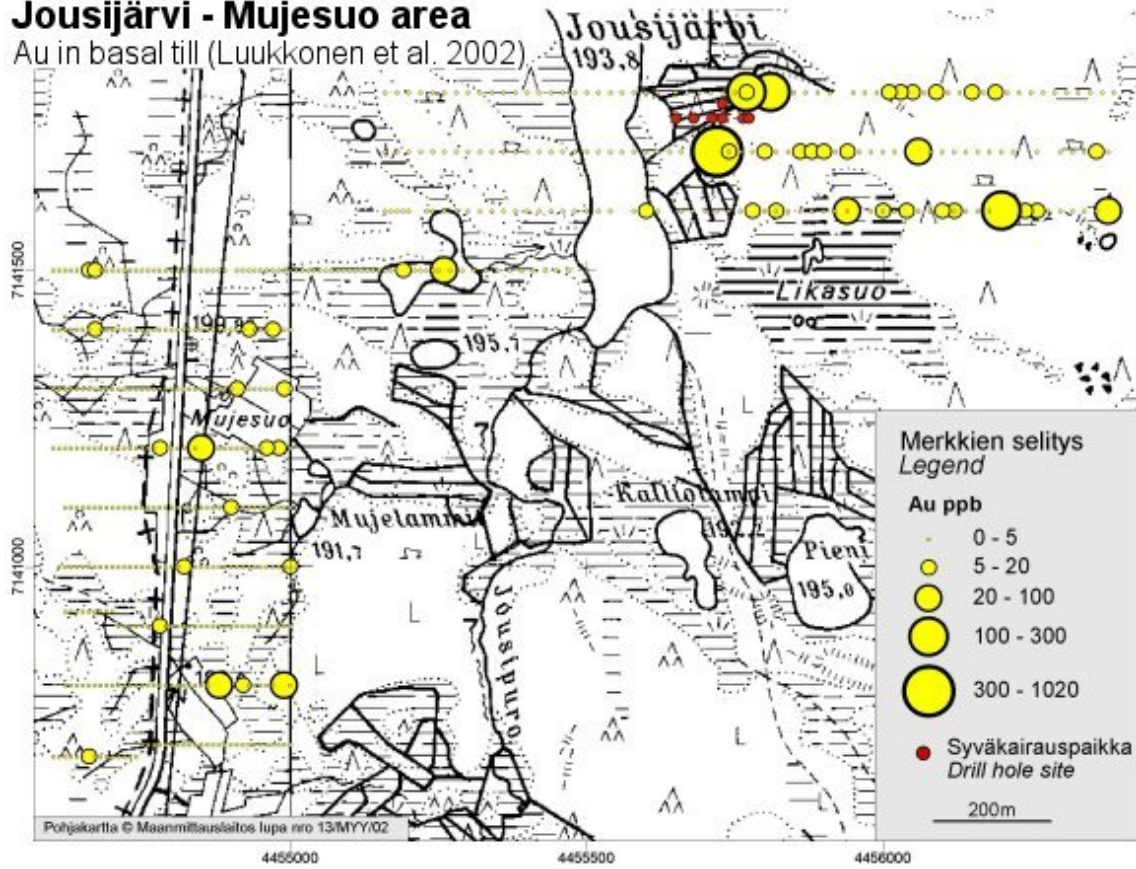
**Kuhmo
greenstone belt**

**As (ppm) and
Au (ppb) in till**
(Luukkonen et al. 2002)

Jousijärvi-Mujesuo area: Au in till:

Jousijärvi - Mujesuo area

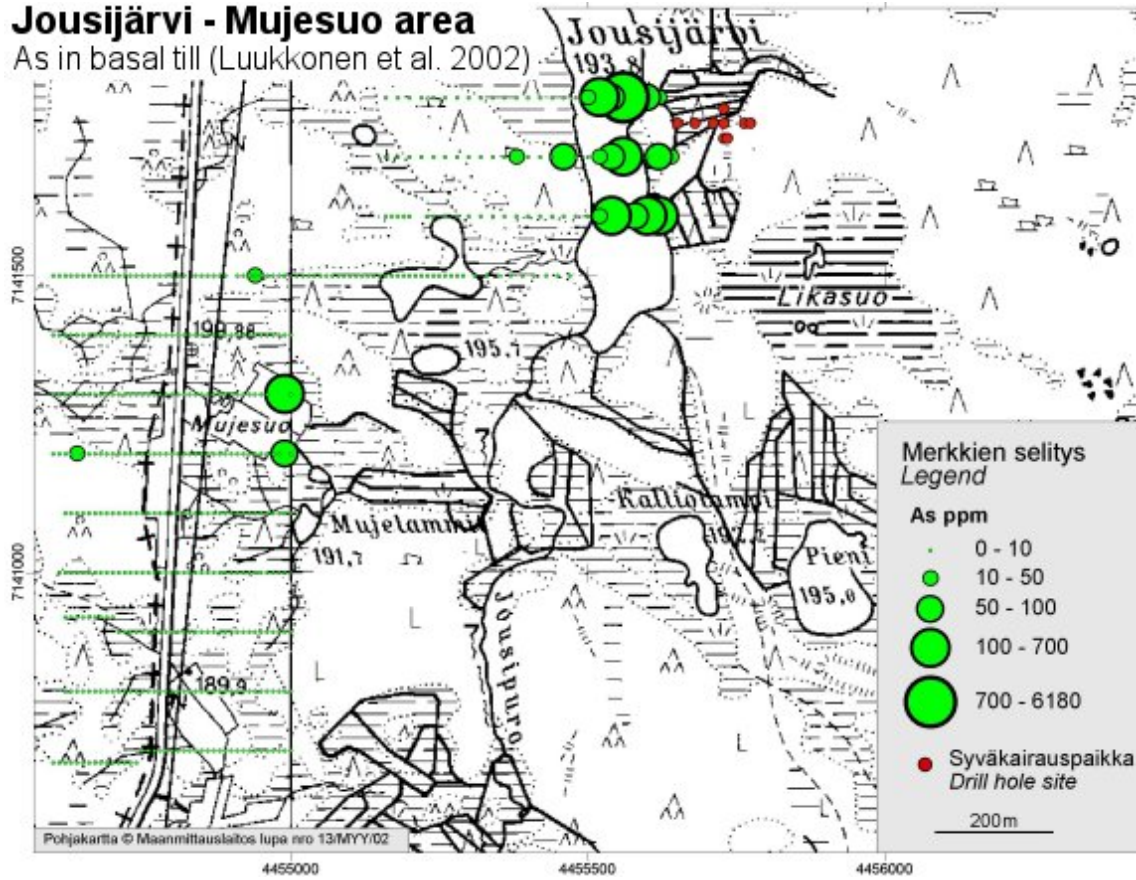
Au in basal till (Luukkonen et al. 2002)



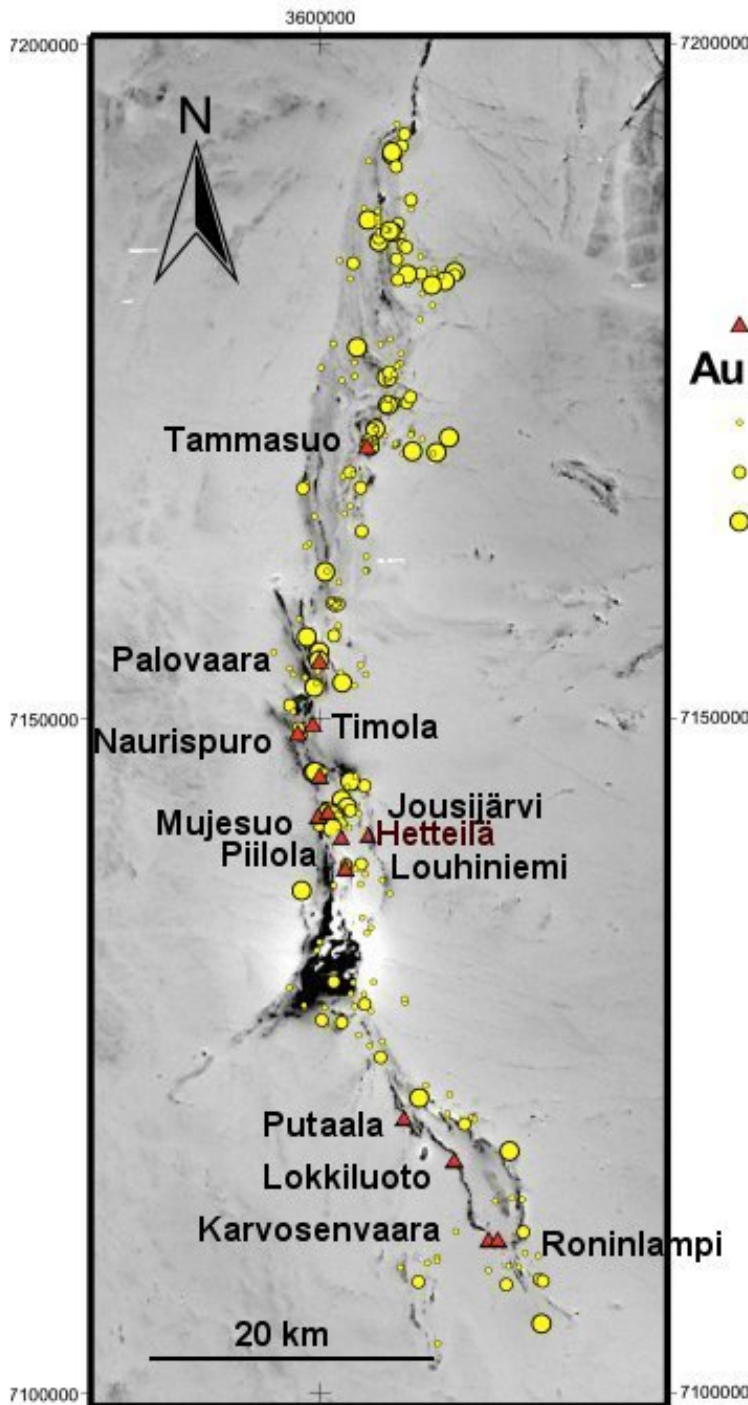
Jousijärvi-Mujesuo area: As in till:

Jousijärvi - Mujesuo area

As in basal till (Luukkonen et al. 2002)



Kuhmo greenstone belt aeromagnetic image with Au in till:



**Kuhmo
greenstone
belt**

- ▲ Au occurrences
- Au in till
 - 0.01 - 0.03 g/t
 - 0.03 - 0.10
 - > 0.10

Background:
Low-altitude
aeromagnetic image

All data by
Geological Survey
of Finland

GEOLOGY

Host rock: Intermediate tuff, Quartz vein

Wall rock: Felsic volcanic rock, Tonalite

Intermediate tuff (Host rock)

Rock type: Host rock

Proportion: major

Grain size: NA

Color: NA

References: 1, 2, 4, 9, 10

Comments: Probably not a real tuff but a tuffite in origin

Metamorphic description:

Ore minerals:

Mineral	Proportion	Mineral texture
Arsenopyrite	minor	

Other minerals:

Mineral	Proportion	Mineral texture
Garnet	minor	

Type:	Facies:	Degree:	Relation to mineralization:	Min P- Max P (kbar)	Min T- Max T (°C)
Regional	epidote amphibolite metamorphic facies	medium metamorphic grade	NA		
<i>Comments: Regional metamorphic grade is transitional between upper-greenschist and lower-amphibolite facies. A very weak, unevenly distributed Palaeoproterozoic overprint.</i>					

Geological age:

Geological era:	Max age - Minage (Ma):	Inferred age (Ma):	Age of mineralization:
Neoproterozoic (2800-2500 Ma)	2560-2700		N

Quartz vein (Host rock)

Rock type: Host rock

Proportion: minor

Grain size: NA

Color: NA

References: 2

Comments: Extensional quartz(-baryte) veins

Felsic volcanic rock (Wall rock)

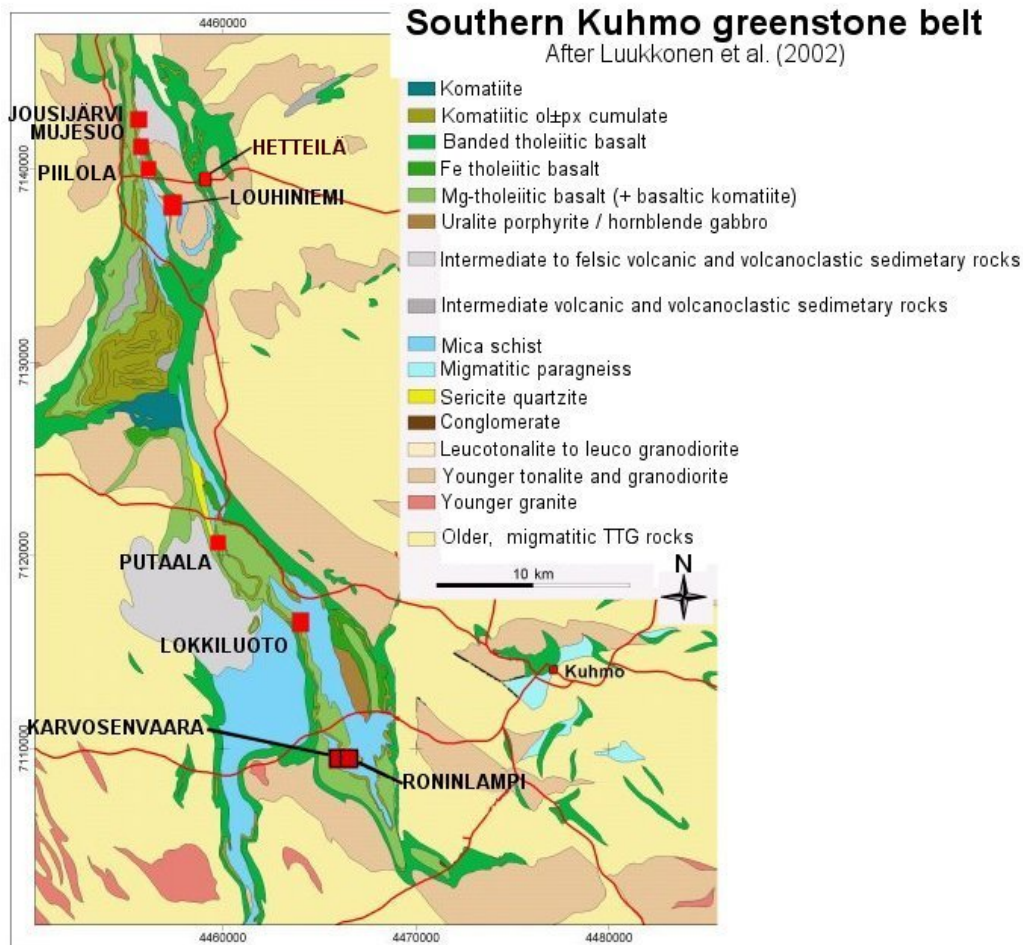
Rock type: Wall rock

Tonalite (Wall rock)

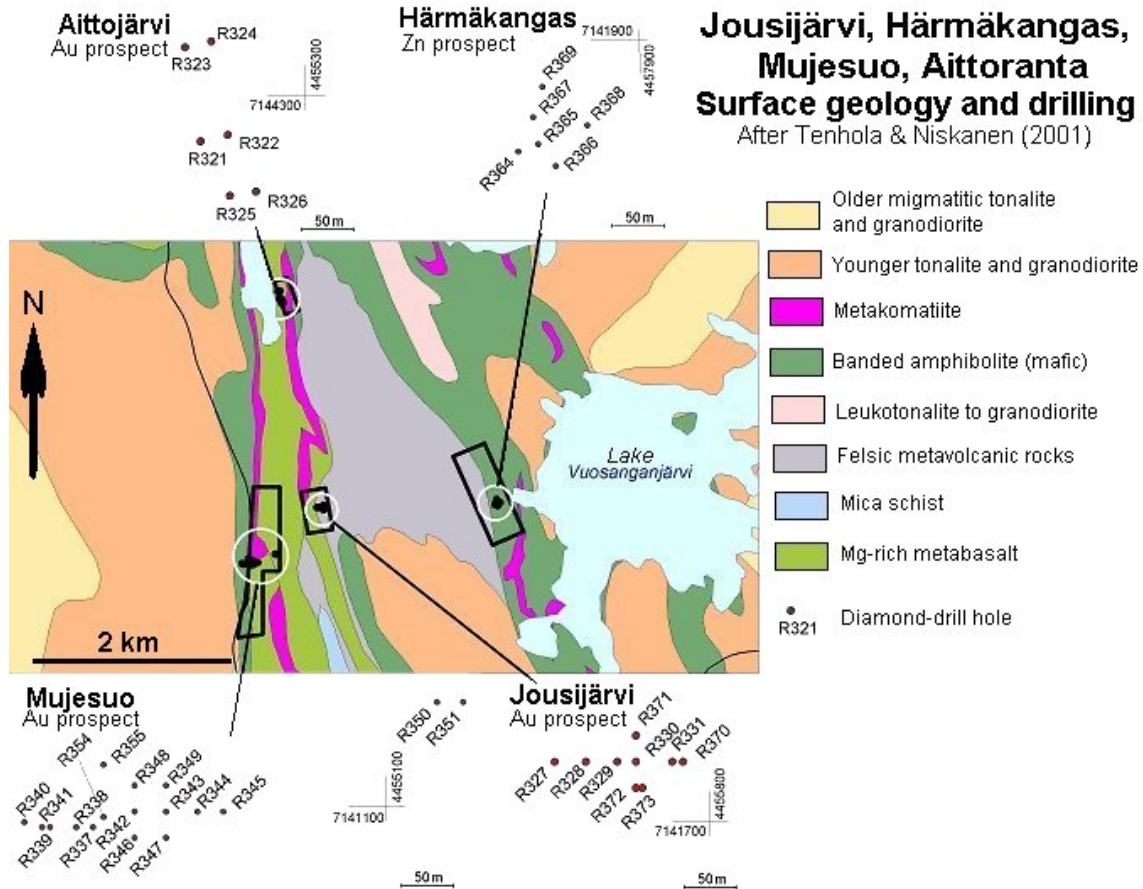
Rock type: Wall rock

Figures

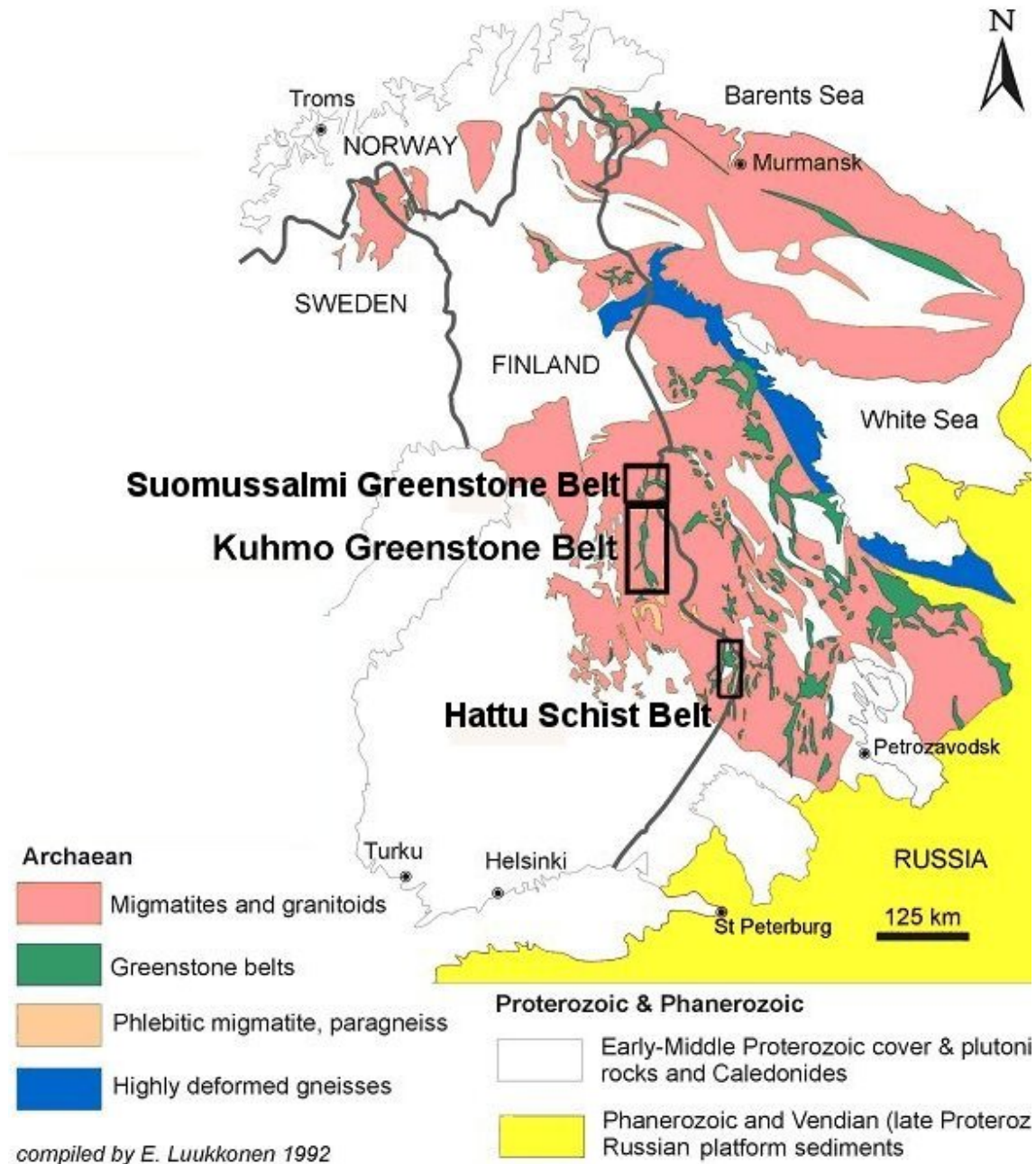
Southern Kuhmo greenstone belt geology and known gold occurrences:



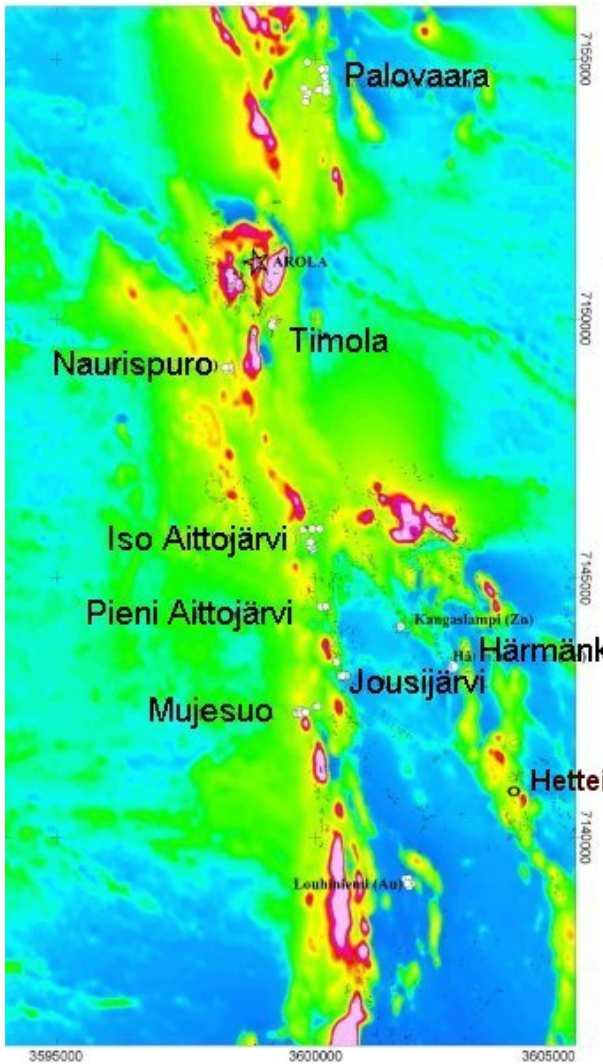
Jousijärvi-Aittoranta area geology:



East Finland greenstone belts in the Carelian craton:



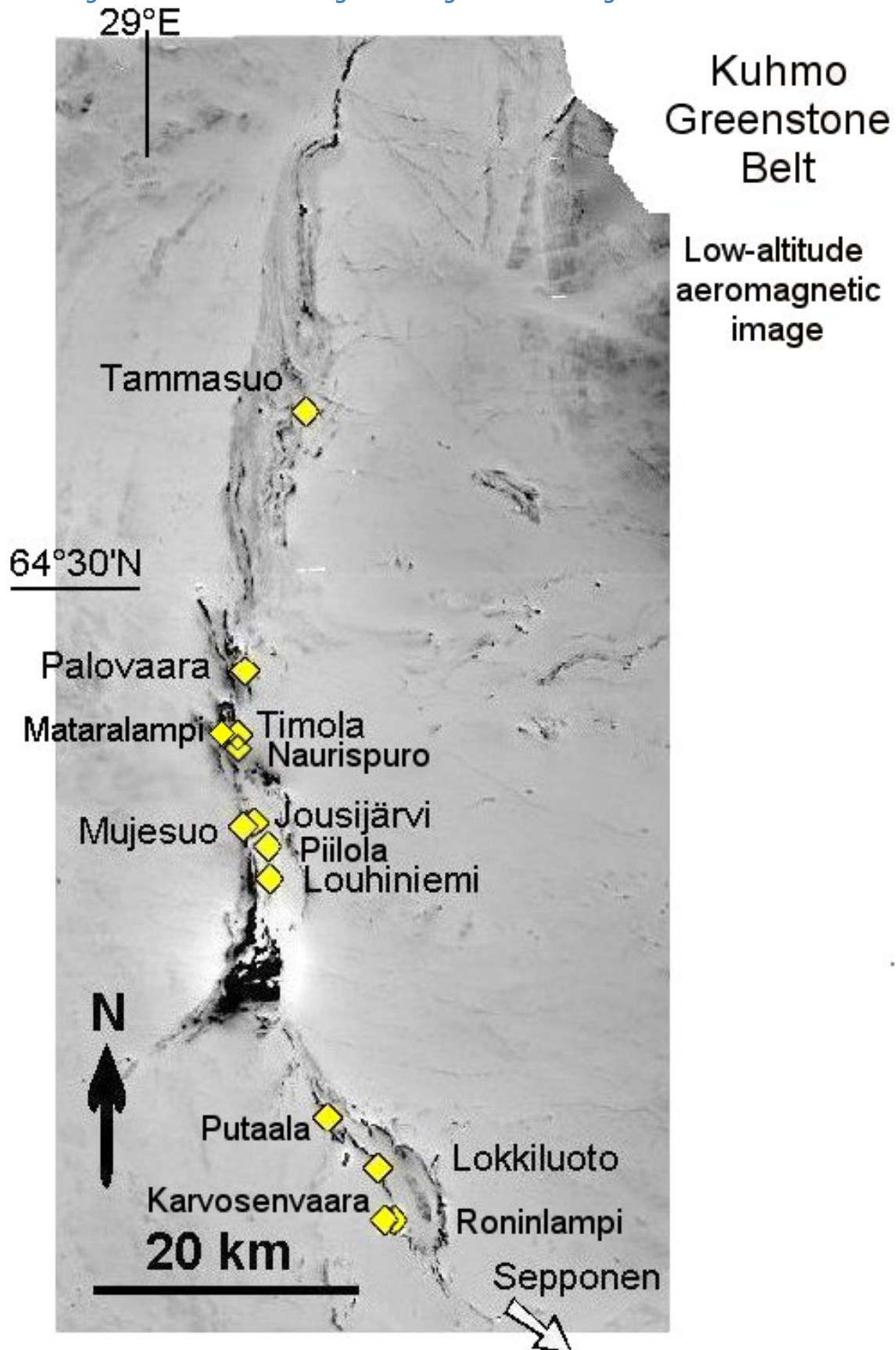
Central Kuhmo greenstone belt aeromagnetic image:



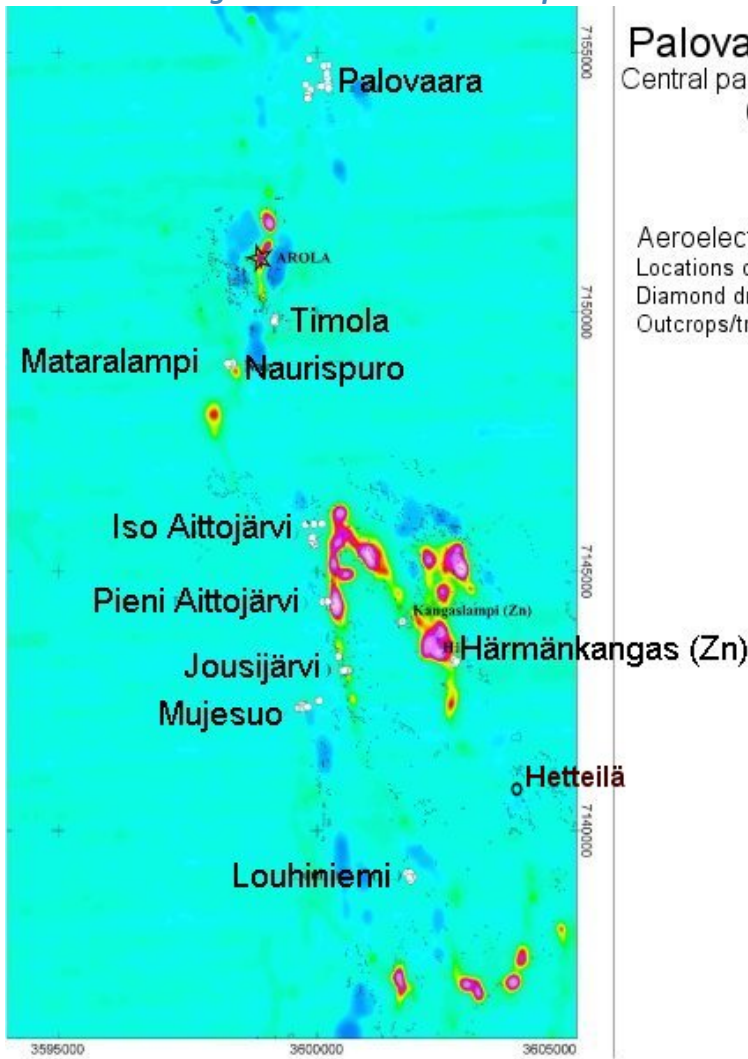
Palovaara-Louhiniemi area
Central part of the Kuhmo Greenstone Belt
(Luukkonen et al. 2002)

Aeromagnetic total intensity
Locations of exploration targets
Diamond drill holes (white circles)
Outcrops/trenches are also shown (tiny dots)

Kuhmo greenstone belt aeromagnetic image with known gold occurrences:



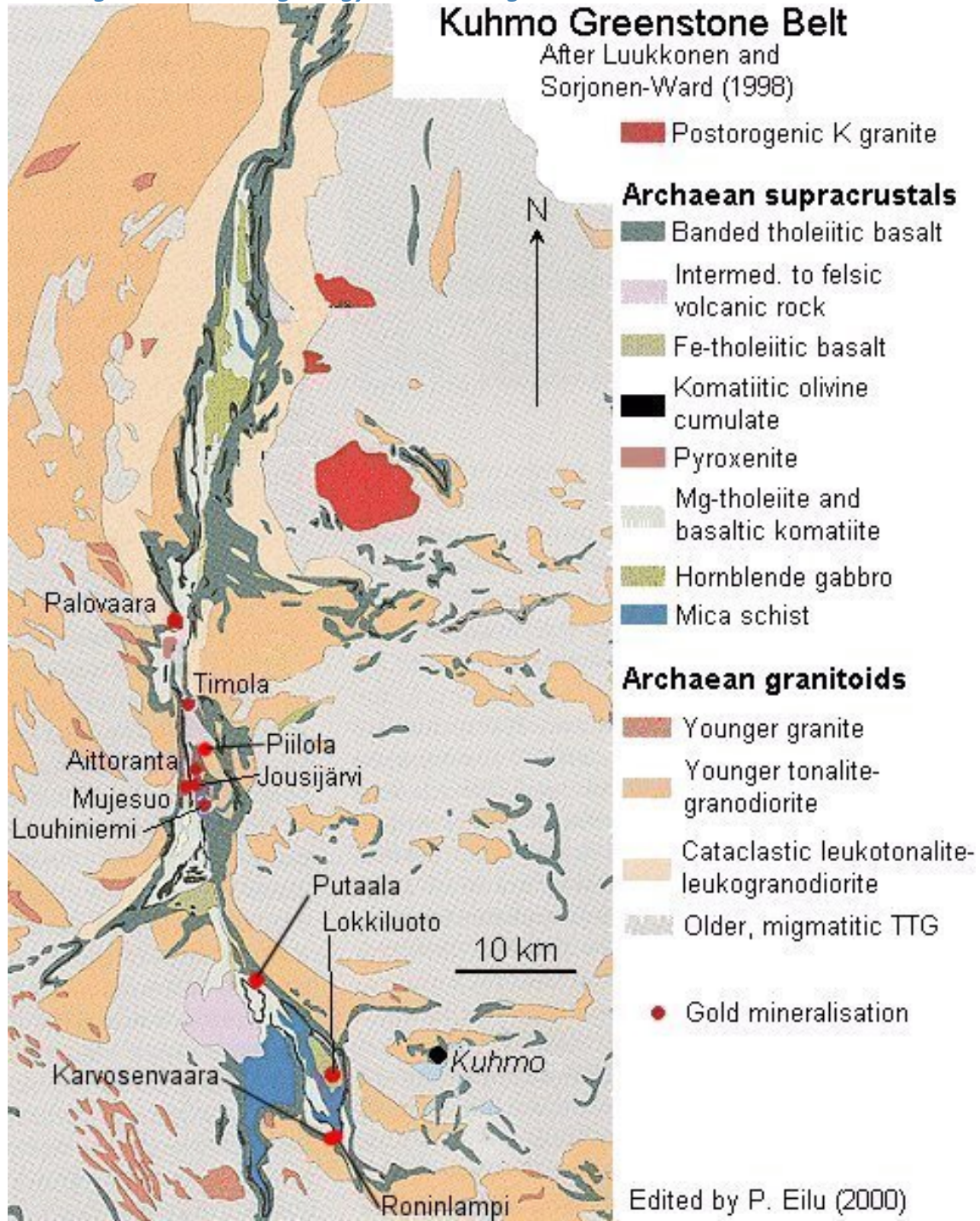
Central Kuhmo greenstone belt real-component electromagnetic image:



Palovaara-Louhiniemi area
Central part of the Kuhmo Greenstone Belt
(Luukkonen et al. 2002)

Aeromagnetic real-component
Locations of exploration targets
Diamond drill holes (white circles)
Outcrops/trenches are also shown (tiny dots)

Kuhmo greenstone belt geology and known gold occurrences:



REFERENCES

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8. Sorjonen-Ward, P. & Luukkonen, E.J. 2005. Archean rocks. In: Precambrian Geology of Finland - Key to the Evolution of The Fennoscandian Shield. Elsevier Science B.V., Amsterdam, 19-99.
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