Stenmo

Alternative Names: Bjensböle
Occurence type: prospect

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

Easting EUREF: 261873,235
Northing EUREF: 6673375,944
Easting YKJ: 3261946
Northing YKJ: 6676179

Discovery year: 1999
Discovered by: Åbo Akademi
Province: Orijärvi (Zn, Cu, Ag, Pb)
Comments: Discovery by Åbo Akademi university study group. First indications were geochemical anomalies in till which led into auriferous outcrops.
References: 1, 5, 7, 10, 11, 12, 13

Mineral deposit type

Group: Metallogenic deposit
Main type: Orogenic (metamorphic hydrothermal)
Comments: The style of veining, metal association, and Au transported as bisulphide complex, perhaps best fits into syn-peak metamorphic and deformational orogenic style of gold mineralisation. However, the abundant chalcopyrite, style vein-related alteration and the country rocks showing synvolcanic, pre-metamorphic, alteration give also the possibility of an early VMS mineralisation wherefrom the gold could have been remobilised during deformation.
References: 9

Group: Metallogenic deposit
Main type: VMS (mixed hydrothermal)
References: 9

Group: Metallogenic deposit
Main type: Epithermal (mixed hydrothermal)
References: 9

Dimension

Expression: exposed
Form: discordant
Shape: NA
Length (m): 2000
Width (m): NA
Thickness (m): 17
Depth (m): 30
Area (ha): NA
Dip azim: 0
Dip: 25
Plunge azim: NA
Plunge dip: NA
Orientation method: NA
Dimension comments: A E-W trending mineralised domain 15-20 m thick, dips at 15-25° to the north, is open along strike for > 2 km and at the depth of 30 m.

Holder history

Previous holders:

Company	Years	Holding type	Comments
private enterprise	2000	NA	Lindroos Alf

EXPLORATION ACTIVITY

private enterprise

Years	Activity type	Geologist	Exploration result	Ref
2000-2000	detailed geophysics	NA	NA	8
	Positive magnetic anomaly on the hanging wall and positive K-40 anomaly on the footwall side of the occurrence .			

Åbo Akademi

Years	Activity type	Geologist	Exploration result	Ref
1999-2000	core drilling	Alf Lindroos	NA	11
	Core drilling (reconnaissance drilling): four diamond-drill holes, total 129 m.			
	Intersections			
	HoleID	NA		
	From-To	NA		
	Length	1m		
	gold	10ppm		

1996-1996	regional geochemistry	Alf Lindroos	NA	7, 11
	KH Renlund Foundation, Council of Varsinais-Suomi.			

1996-1996	detailed geology	Alf Lindroos	NA	7, 11
	KH Renlund Foundation, Council of Varsinais-Suomi.			

1996-1996	core drilling	Alf Lindroos	NA	7, 11
	KH Renlund Foundation, Council of Varsinais-Suomi.			

Geological Survey of Finland

Years	Activity type	Geologist	Exploration result	Ref
1995-1995	regional geophysics	NA	key geological features	
	Low-altitude airborne magnetic, electromagnetic and radiometric survey			

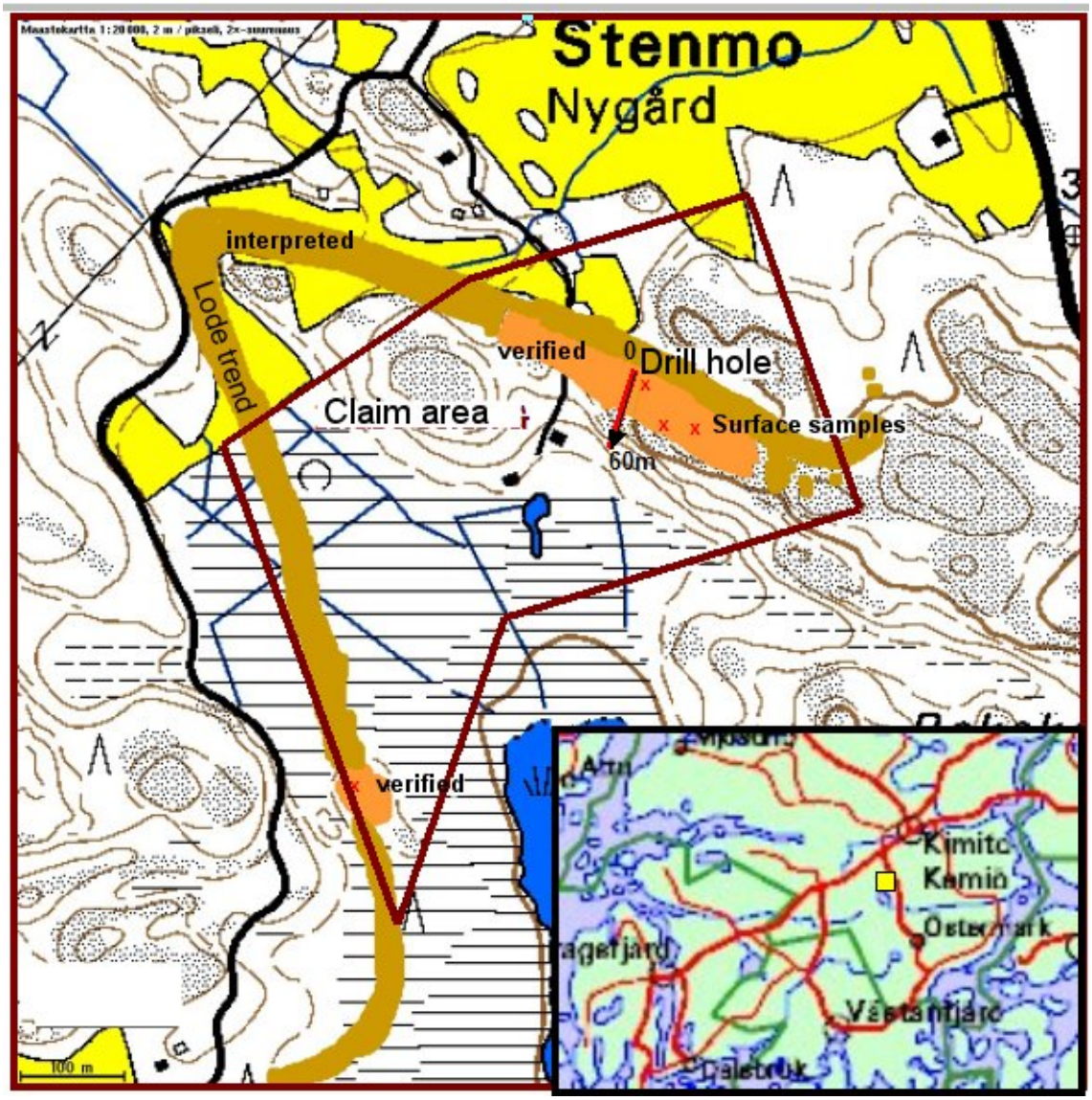
Outokumpu Oy

Years	Activity type	Geologist	Exploration result	Ref
1987-1987	regional geology	NA	NA	4

Figures

Stenmo

Topographic map, claim area, drilling sites and lodes
(Lindroos & Ehlers 2005)



GEOLOGY

Host rock: Sillimanite Gneiss, Mica schist, Quartz vein
Wall rock: Amphibolite, Felsic volcanic rock

Sillimanite Gneiss (Host rock)

Rock type: Host rock
Proportion: minor
Grain size: NA
Color: NA
References: 2, 3, 6, 7, 8, 9, 11
Comments: The mineralised unit is overlain by a magnetite-rich garnet gneiss unit which grades upwards into garnet-antophyllite gneiss and then to sillimanite gneiss.

Metamorphic description:

Other minerals:

Mineral	Proportion	Mineral texture
Sillimanite	present	Alteration product

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: Peak metamorphism during D3 deformation. On the other hand, the wide-spread sillimanite porphyroblasts were formed during D2b.					

Geological age:

Geological era:	Max age - Minage (Ma):	Inferred age (Ma):	Age of mineralization:
Paleoproterozoic (2500-1600 Ma)	1870-1930		N

Mica schist (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 2, 3, 6, 7, 9, 11

Metamorphic description:
Ore minerals:

Mineral	Proportion	Mineral texture
Bismuth	minor	
Chalcopyrite	minor	
Cubanite	minor	
Gold	minor	
	Native gold in quartz veins, especially along vein margins.	

Maldonite	minor
Pentlandite	minor
Pyrite	major
Pyrrhotite	major
Scheelite	minor

Other minerals:

Mineral	Proportion	Mineral texture
Biotite	present	
Chlorite	present	Alteration product
Hornblende	present	
Magnetite	present	Alteration product
Quartz	present	
Sericite	present	Alteration product

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: Peak metamorphism during D3 deformation. On the other hand, the wide-spread sillimanite porphyroblasts were formed during D2b; Quartz-plagioclase-biotite-muscovite.					

Geological age:

Geological era:	Max age - Minage (Ma):	Inferred age (Ma):	Age of mineralization:
Paleoproterozoic (2500-1600 Ma)	1870-1930		N
Comments: Structural indications strongly suggest that the auriferous quartz veins were formed between 1.83 and 1.81 Ga; Mineralisation after the D3 peak of regional metamorphism.			

Quartz vein (Host rock)

Rock type: Host rock
Proportion: minor
Grain size: NA
Color: NA
References: 11
Comments: A conjugate set of rusty, auriferous, 1 mm - 50 cm wide, quartz veins and a set of white, barren quartz veins

Amphibolite (Wall rock)

Rock type: Wall rock
Proportion: minor
Grain size: NA
Color: NA
References: 2, 3, 6, 7, 8, 9, 11

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: Peak metamorphism during D3 deformation. On the other hand, the wide-spread sillimanite porphyroblasts were formed during D2b; Hornblende-plagioclase ± quartz, titanite.

Geological age:

Geological era:	Max age - Minage (Ma):	Inferred age (Ma):	Age of mineralization:
Paleoproterozoic (2500-1600 Ma)	1870-1930		N

Felsic volcanic rock (Wall rock)

Rock type: Wall rock
Proportion: minor
Grain size: NA
Color: NA
References: 2, 3, 6, 7, 8, 9, 11
Comments: In the footwall, there is a K-rich felsic volcanic unit.

Metamorphic description:

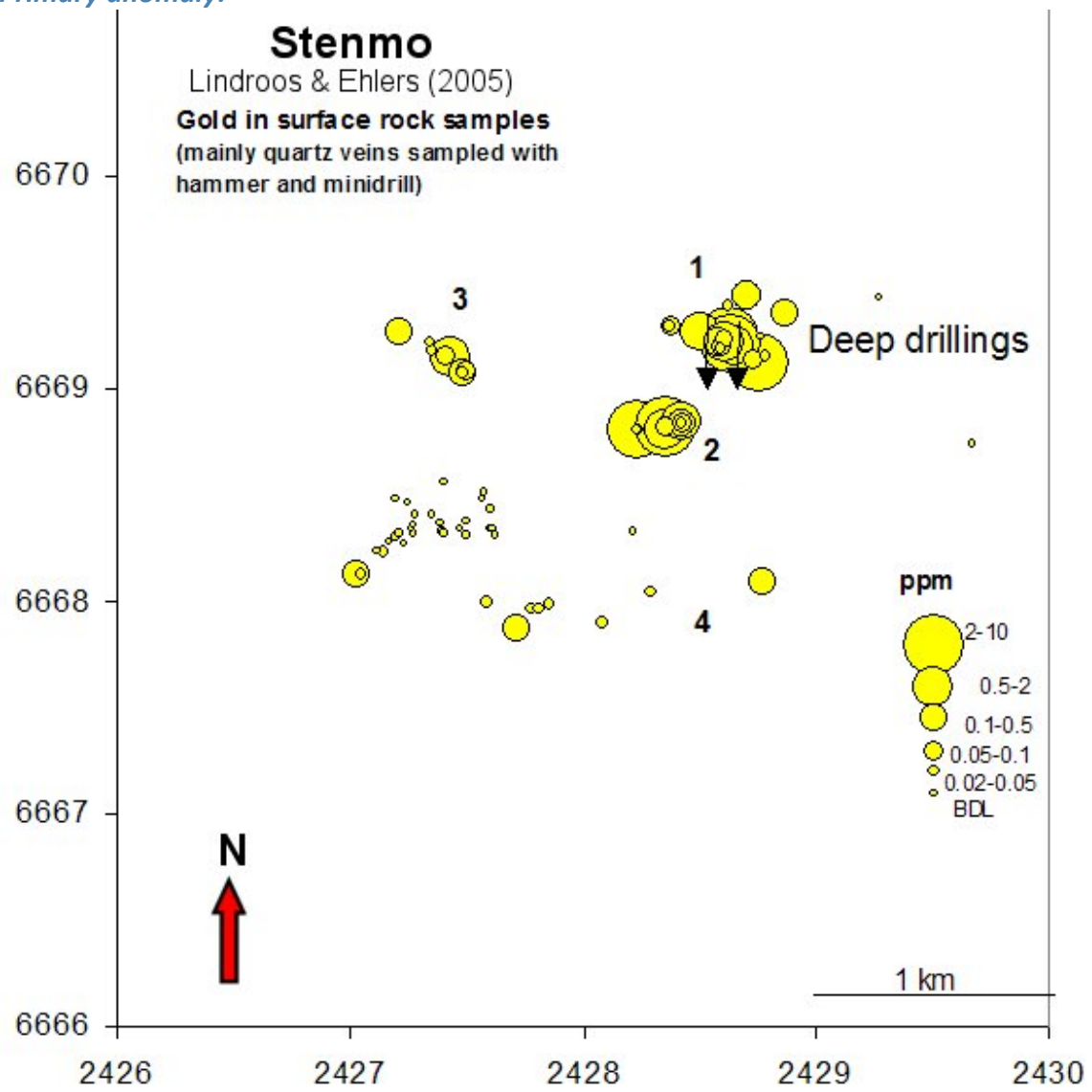
Type:	Facies:	Degree:	Relation to mineralization:	Min P- Max P (kbar)	MIn T- Max T (°C)
Regional	amphibolite metamorphic facies	medium metamorphic grade	NA		
Comments: Peak metamorphism during D3 deformation. On the other hand, the wide-spread sillimanite porphyroblasts were formed during D2b; Quartz-K feldspar ± biotite, plagioclase, muscovite, sillimanite, garnet, antophyllite.					

Geological age:

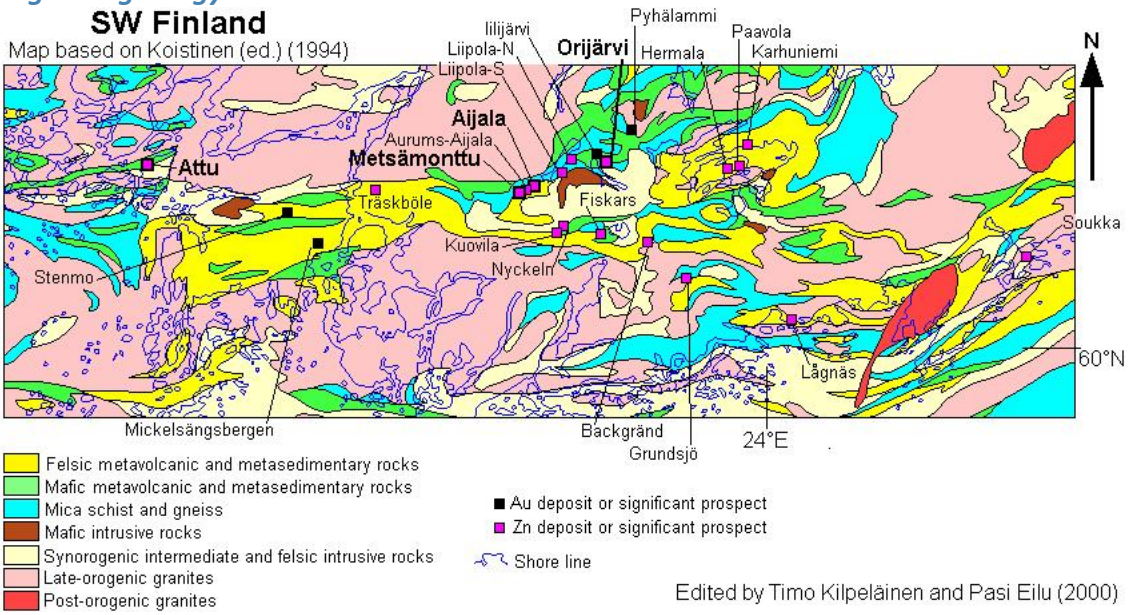
Geological era:	Max age - Minage (Ma):	Inferred age (Ma):	Age of mineralization:
Paleoproterozoic (2500-1600 Ma)	1870-1930		N

Figures

Primary anomaly:



Regional geology:



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