Pääneva

Occurence type: occurrence

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

Easting EUREF: 407796,148
Northing EUREF: 7103109,166
Easting YKJ: 3407931
Northing YKJ: 7106085

Discovery year: 2005
Discovered by: Geological Survey of Finland
Province: Laivakangas (Au, Cu)
District: Vesiperä (Au, Cu, Ag)
Comments: Discovery by GTK; The first indication of gold in the region was a gold-rich outcrop detected by an amateur prospector.

Mineral deposit type

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

Dimension

Expression: exposed
Form: discordant
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

Holder history

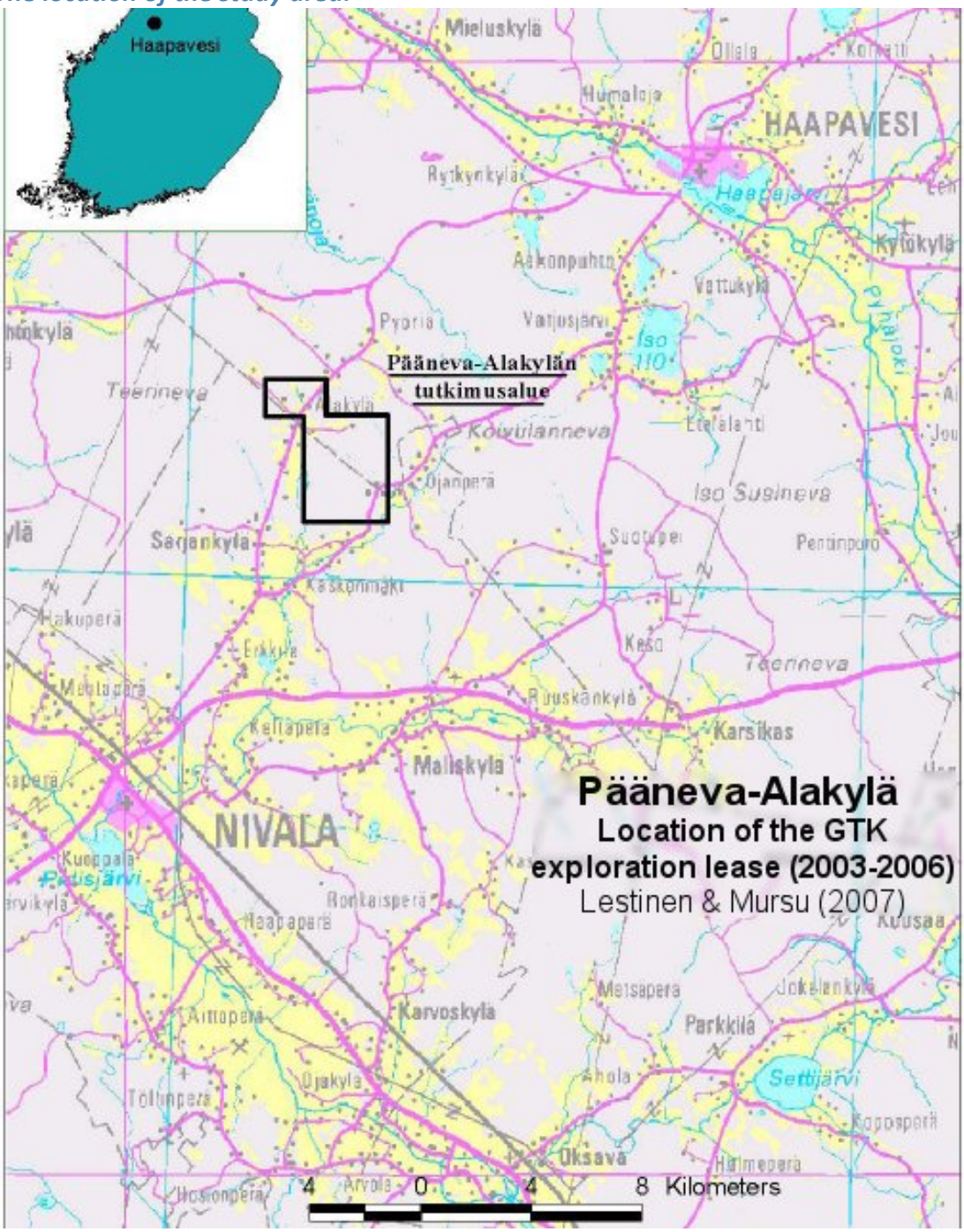
Current holder: Lakeuden Malmi Oy
Years: 2022-2026
Holding type: Exploration permit

Previous holders:

Company	Years	Holding type	Comments
BR Gold Mining Oy	2014	Claim reservation (old law)	application in 2010
Geological Survey of Finland	2005-2010	Claim (old law)	NA

Figures

The location of the study area:



EXPLORATION ACTIVITY

Geological Survey of Finland

Years	Activity type	Geologist	Exploration result	Ref
2005-2005	core drilling	Pekka Lestinen	NA	1
	Core drilling (reconnaissance drilling): 3 diamond-drill holes, total 310 m.			
	Intersections			
	HoleID	R476		
	From-To	18,2-19,2		
	Length	1m		
	gold	1,45ppm		

2005-2007	detailed geology	Pekka Lestinen	NA	1
	The first indication of gold in the region was a gold-rich outcrop detected by an amateur prospector.			

2004-2006	detailed geophysics	Pekka Lestinen	NA	1
	The mineralised zones give a good response on IP.			

1999-2004	detailed geochemistry	Pekka Lestinen	NA	1, 2
	detailed geochemistry in 1999-2001 and 2004 (by percussion drilling); Arsenic anomaly in till relates to the gold occurence; the highest As anomalies also show a strong positive correlation with the IPS anomalies. Where Au does not correlate with As, the is a Bi and/or Te anomaly in till. A single-point Au anomaly of 78 ppm in till.			

1985-1985	detailed geology	E. Sipilä	NA	3

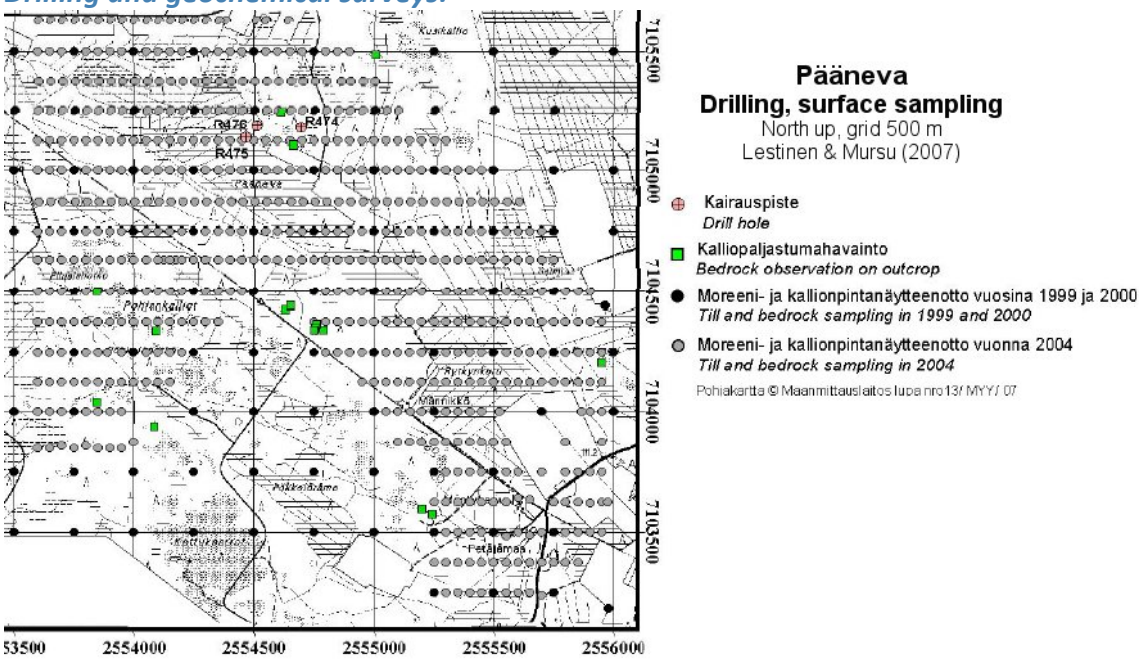
1983-1983	regional geochemistry	NA	NA	1
	Regional geochemical till survey			

1976-1976	regional geophysics	NA	key geological features	1
	Low-altitude airborne magnetic, electromagnetic and radiometric survey			

1939-1940	detailed geology	NA	NA	1

Figures

Drilling and geochemical surveys:



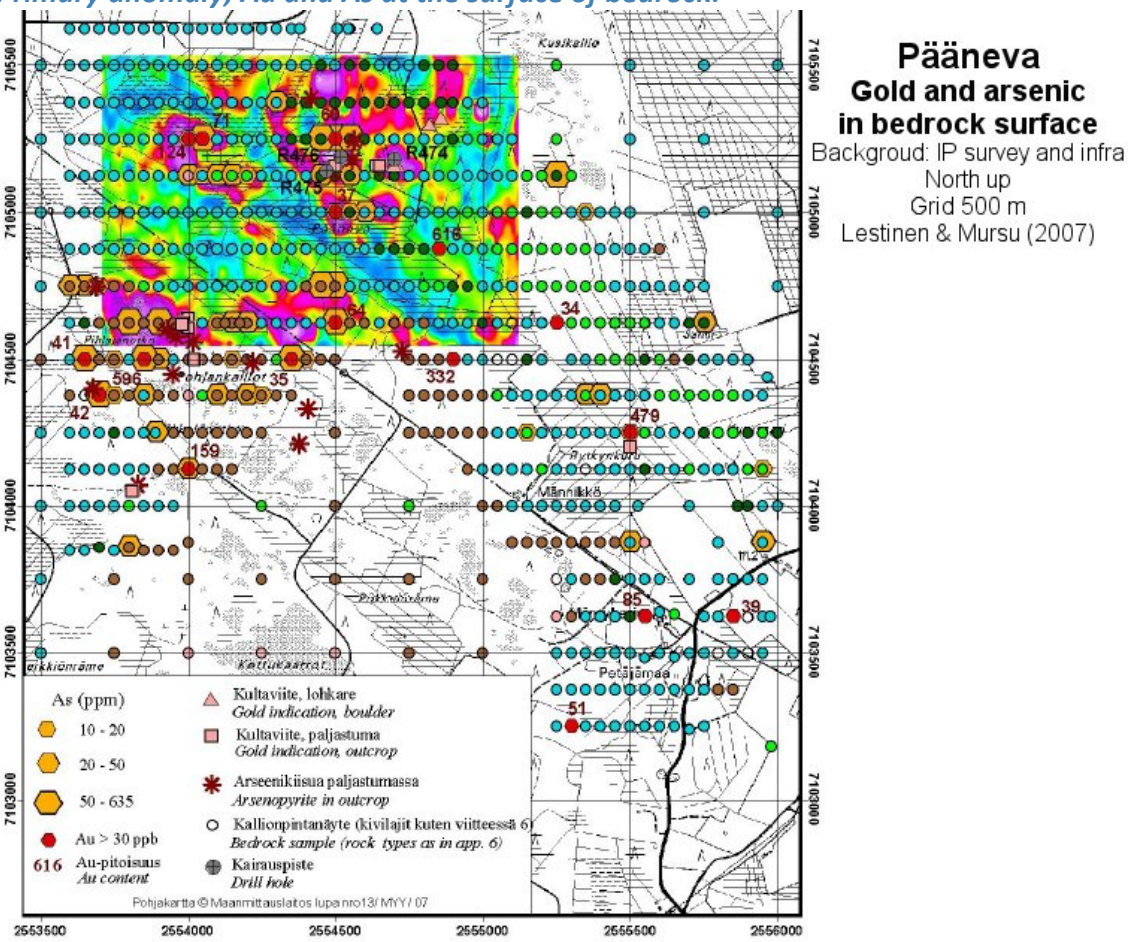
Ore composition:

Table 3. Analytical data of the mineralised drill core samples at the Pääneva region.

Reikä *Drill hole*	Syvyysväli (m) *Depth interval (m)*	Au ppb	As ppm	Bi ppb	Cu ppm	Sb ppb	S %	Se ppb	Te ppb
R474	85.30 - 86.30	51	18	360	193	171	0.59	379	84
R475	52.40 - 53.40	243	79	106	224	677	0.21	125	<25
R476	11.20 - 12.20	530	88	198	127	365	1.66	<50	<25
R476	13.20 – 14.20	520	906	76	43	297	0.54	<50	32
R476	18.20 – 19.20	1450	11600	4720	206	12800	1.79	236	709
R476	23.80 – 24.50	482	2870	534	189	1140	1.18	<50	<25
R476	54.70 - 55.20	463	17600	575	315	1060	1.83	66	69

Data from Lestinen & Mursu (2007)

Primary anomaly; Au and As at the surface of bedrock:



GEOLOGY

Host rock: Intermediate volcanic rock

Intermediate volcanic rock (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 1
Comments: intermediate dyke (plagioclase porphyrite and porphyric diorite). NW- to NNE-trending quartz veins

Metamorphic description:
Ore minerals:

Mineral	Proportion	Mineral texture
Arsenopyrite	major	
	Gold occurs related to arsenopyrite and silicate gangue.	
Chalcopyrite	minor	
Pyrite	minor	
Pyrrhotite	major	

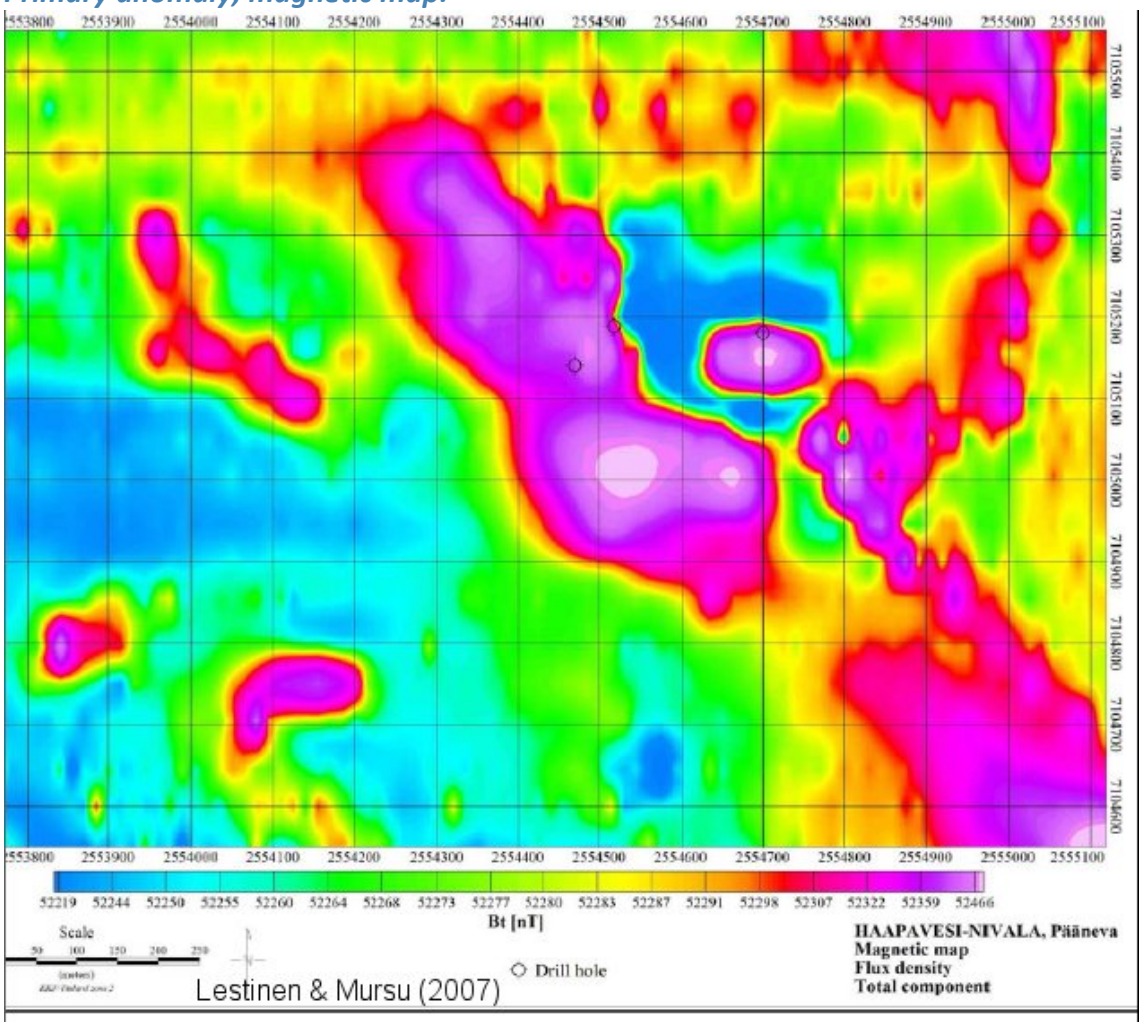
Other minerals:

Mineral	Proportion	Mineral texture
Amphibole	present	Alteration product
Epidote	present	Alteration product
Garnet	present	Alteration product
K-Feldspar	present	
Quartz	present	Alteration product
Scheelite	present	

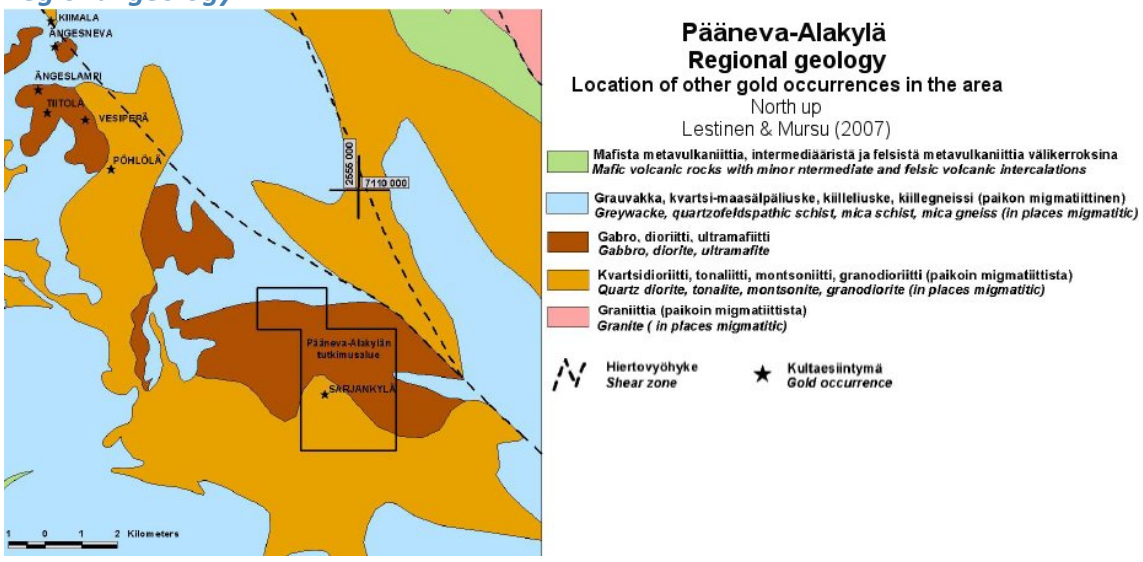
Type:	Facies:	Degree:	Relation to mineralization:	Min P- Max P (kbar)	MIn T- Max T (°C)
Regional	amphibolite metamorphic facies	medium metamorphic grade	NA		

Figures

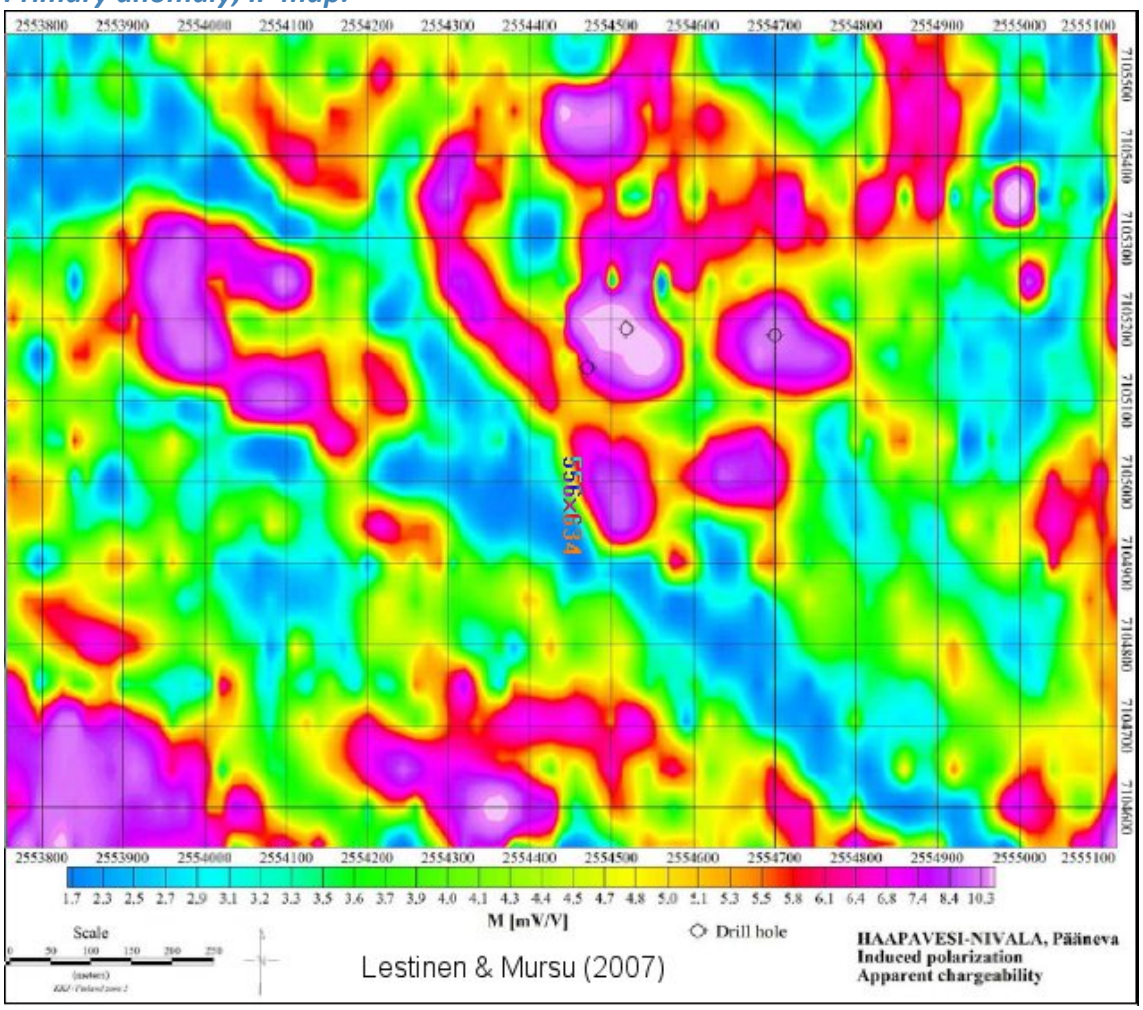
Primary anomaly; magnetic map:



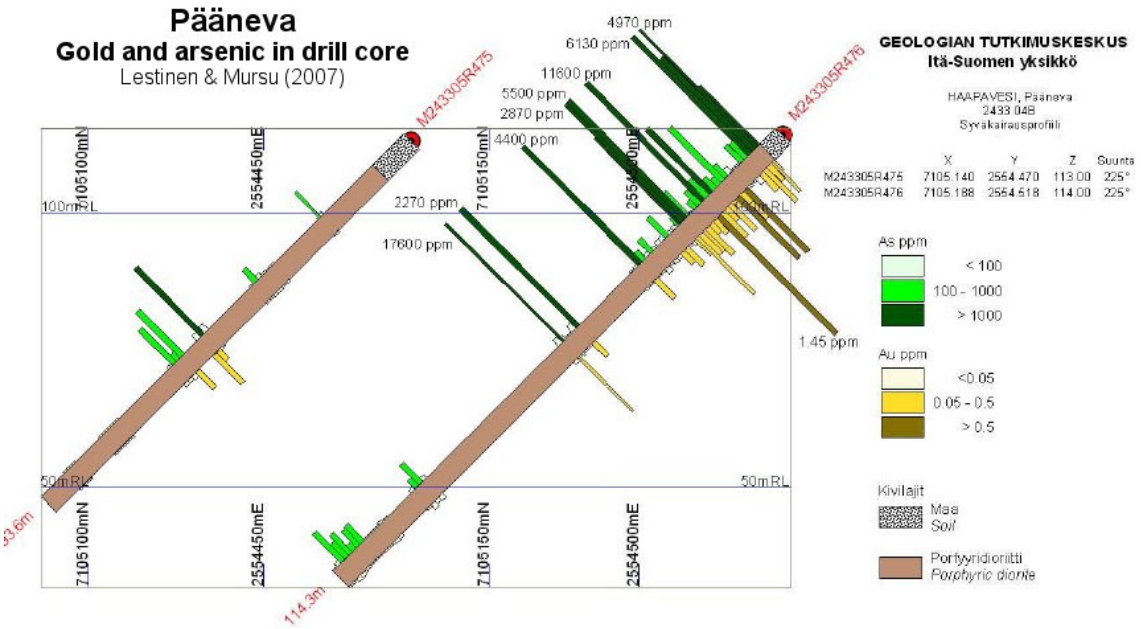
Regional geology:



Primary anomaly; IP map:



Cross section:



REFERENCES

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3. Sipilä, E. 1990. Kultatutkimukset Nivalan Sarjankylässä 1985. Geological Survey of Finland, Report M19/2433/-90/1/1. 8 p. (in Finnish)*http://tupa.gtk.fi/raportti/arkisto/m19_2433_90_1_10.pdf*