Kangaskylä

Occurence type: occurrence

Commodity	Rank	Total measure	Total production	Total resource	Importance
gold	1	NA	NA	NA	NA
copper	3	NA	NA	NA	NA

Easting EUREF: 389362,904
Northing EUREF: 7062943,26

Easting YKJ: 3389490
Northing YKJ: 7065903

Discovery year: 1887
Province: Laivakangas (Au, Cu)
References: 4

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: GemGold Oy
Years: 2020-2024
Holding type: Exploration permit

Previous holders:

Company	Years	Holding type	Comments
Tertiary Gold Ltd	NA	NA	NA
Strategic Explorations Oy	2019	Application for exploration permit	NA
Belvedere Resources Ltd	2004-2012	Claim (old law)	NA
Outokumpu Oy	1971-1984	NA	NA
Geological Survey of Finland	1956-1960	NA	NA

EXPLORATION ACTIVITY

Outokumpu Oy

Years	Activity type	Geologist	Exploration result	Ref
1983-1985	core drilling	Eero Pehkonen Esa Sandberg, Tauno Huhtala	NA	1, 2, 9
	Core drilling (reconnaissance drilling): 45 diamond-drill holes, total 5595 m.			
	Intersections			
	HoleID	NA		
	From-To	NA		
	Length	1m		
	gold	4,8ppm		
	HoleID	NA		
	From-To	NA		
	Length	1m		
	gold	26,7ppm		
	copper	0,44%		
	Comments	*As content 0.79 %*		

Geological Survey of Finland

Years	Activity type	Geologist	Exploration result	Ref
1978-1978	regional geophysics	NA	key geological features	
	Low-altitude airborne mahnetic, electromagnetic and radiometric survey			

Outokumpu Oy

Years	Activity type	Geologist	Exploration result	Ref
1972-1975	core drilling	Eero Pehkonen Esa Sandberg, Tauno Huhtala	NA	1, 2, 9
	Core drilling (reconnaissance drilling): 45 diamond-drill holes, total 5595 m.			
	Intersections			
	HoleID	NA		
	From-To	NA		
	Length	0,6m		
	gold	35ppm		
	Comments	*A quartz vein*		

1971-1984	regional geochemistry	Eero Pehkonen Esa Sandberg, Tauno Huhtala	NA	1, 2, 3, 5, 9

1971-1984	detailed geology	Eero Pehkonen Esa Sandberg, Tauno Huhtala	NA	1, 2, 3, 5, 9

1971-1984	detailed geochemistry	Eero Pehkonen Esa Sandberg, Tauno Huhtala	NA	5
	Till and stream sediment anomalies for Au, As, Cu, Mo and W are ambiguous in the area.			

1971-1984	excavation	Eero Pehkonen Esa Sandberg, Tauno Huhtala	NA	1, 2, 3, 5, 9

1971-1984	detailed geophysics	Eero Pehkonen Esa Sandberg, Tauno Huhtala	NA	9
	Only by IP.			

Geological Survey of Finland

Years	Activity type	Geologist	Exploration result	Ref
1958-1959	core drilling	NA	NA	2, 8
	Core drilling (reconnaissance drilling): 32 diamond-drill holes.			

1956-1960	detailed geophysics	NA	NA	8

1956-1960	detailed geology	NA	NA	8
	Several Au- and Ag-rich boulders found.			

1956-1960	regional geochemistry	NA	NA	8

1956-1960	excavation	NA	NA	8

GEOLOGY

Host rock: Mafic volcanic rock, Granodiorite, Mica schist

Mafic volcanic rock (Host rock)

Rock type: Host rock
Proportion: major
Grain size: NA
Color: NA
References: 1, 2, 5, 6, 7, 8, 9
Comments: Contains auriferous quartz veins.

Ore minerals:

Mineral	Proportion	Mineral texture
Arsenopyrite	major	
Boulangerite	minor	
Bournonite	minor	
Chalcopyrite	major	
Gold	minor	
	native Au in quartz veins, chiefly as inclusions in arsenopyrite and silicates	
Pyrite	major	
Pyrrhotite	major	
Sphalerite	minor	

Other minerals:

Mineral	Proportion	Mineral texture
Calcite	present	
K-Feldspar	present	Alteration product
Muscovite	present	Alteration product
Quartz	present	
Scheelite	present	
Tourmaline	present	

Alteration:	Distribution:	Degree:	Relation to mineralization:
epidote alteration	Veins	NA	Syn
Comments: Au-related alteration around the veins.			
sericitic alteration	Veins	NA	Syn
Comments: Au-related alteration around the veins.			
tourmalinisation	Veins	NA	Syn
Comments: Au-related alteration around the veins.			
carbonate alteration	Veins	NA	Syn
Comments: Au-related alteration around the veins.			
chloritic alteration	Veins	NA	Syn
Comments: Au-related alteration around the veins.			

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		

Granodiorite (Host rock)

Rock type: Host rock
Proportion: minor
Grain size: NA
Color: NA
References: 1, 5, 7, 9
Comments: The deposit is in the contact zone between the supracrustal rocks and the granitoid. Contains auriferous quartz veins.

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		

Geological age:

Geological era:	Max age - Minage (Ma):	Inferred age (Ma):	Age of mineralization:
Paleoproterozoic (2500-1600 Ma)	1870-1880		N
Comments: Synorogenic granitoids.			

Mica schist (Host rock)

Rock type: Host rock
Proportion: minor
Grain size: NA
Color: NA
References: 1, 5, 7, 9
Comments: The deposit is in the contact zone between the supracrustal rocks and the granitoid. Contains auriferous quartz veins.

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		

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