

GTK:n näytearkistojen kehittäminen

Development of GTK sample archives

Tukes & GTK: Malminetsintäinfo

14.05.2025

Hanna Leväniemi, GTK



National sample archive in Loppi, southern Finland

Key figures

- 1.5 hours from Helsinki
- 3,833 km of drill core
- 11 storage buildings
- 400 m of logging table (5 tables)
- First samples from early 1900's

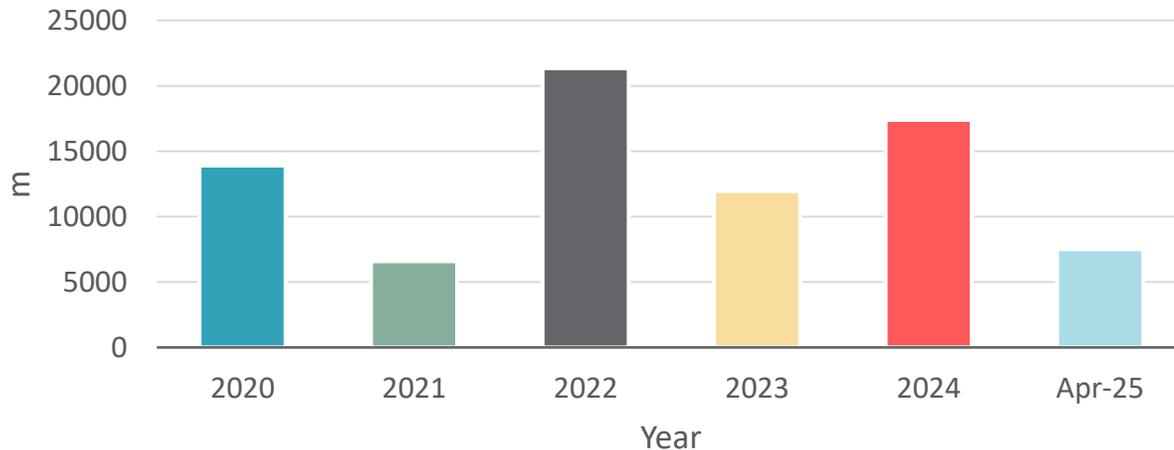
<https://www.gtk.fi/en/research-infrastructure/national-drill-core-archive/>



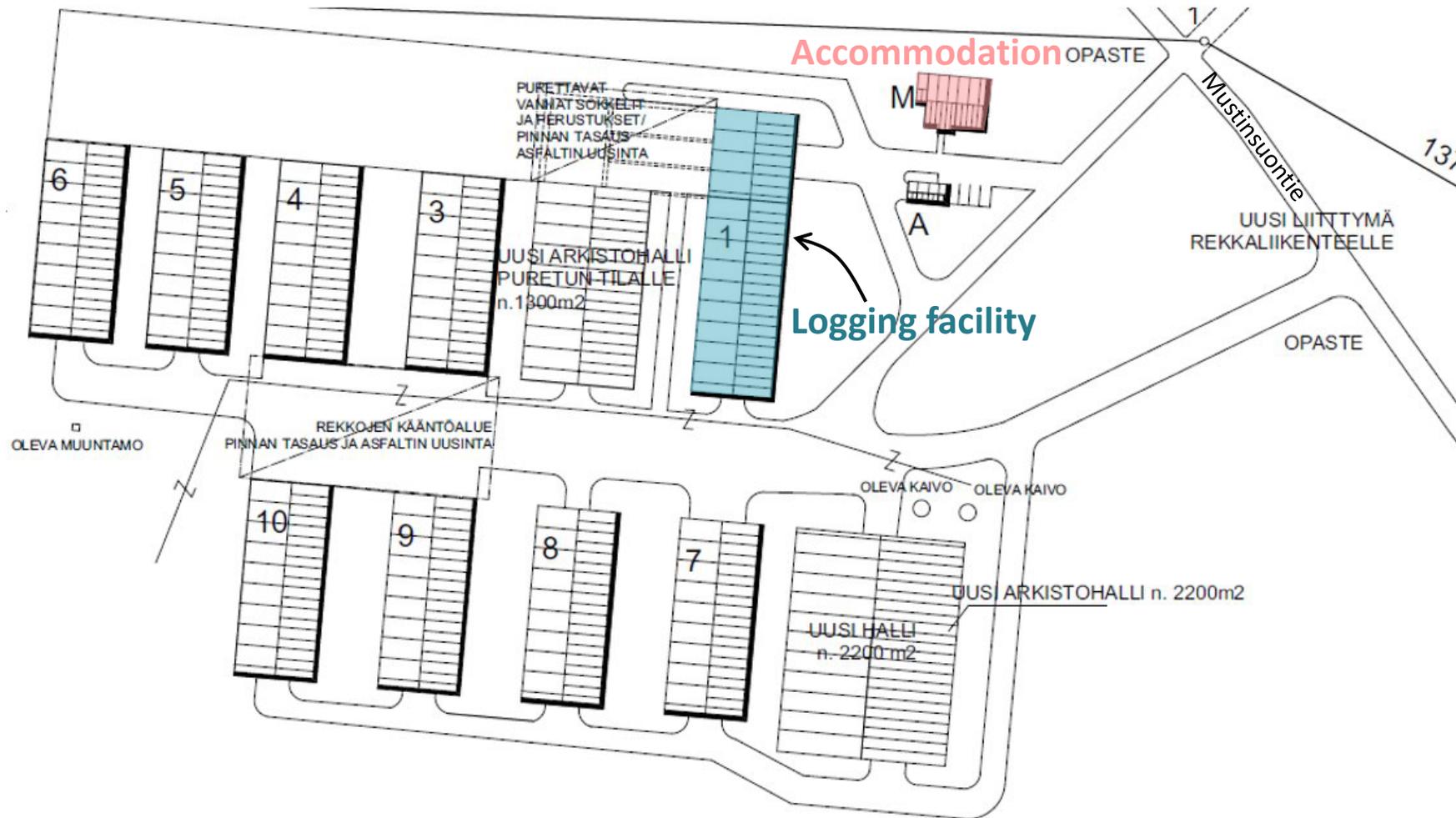
Drill cores at Loppi

- At the end of 2024, the archive houses 39,898 drill holes (3,833,083 metres)
- GTK receives representative exploration and mining drill cores as per the Mining Act
 - *Nine suggestions currently waiting for evaluation*

External drill cores to be archived at Loppi based on given statements

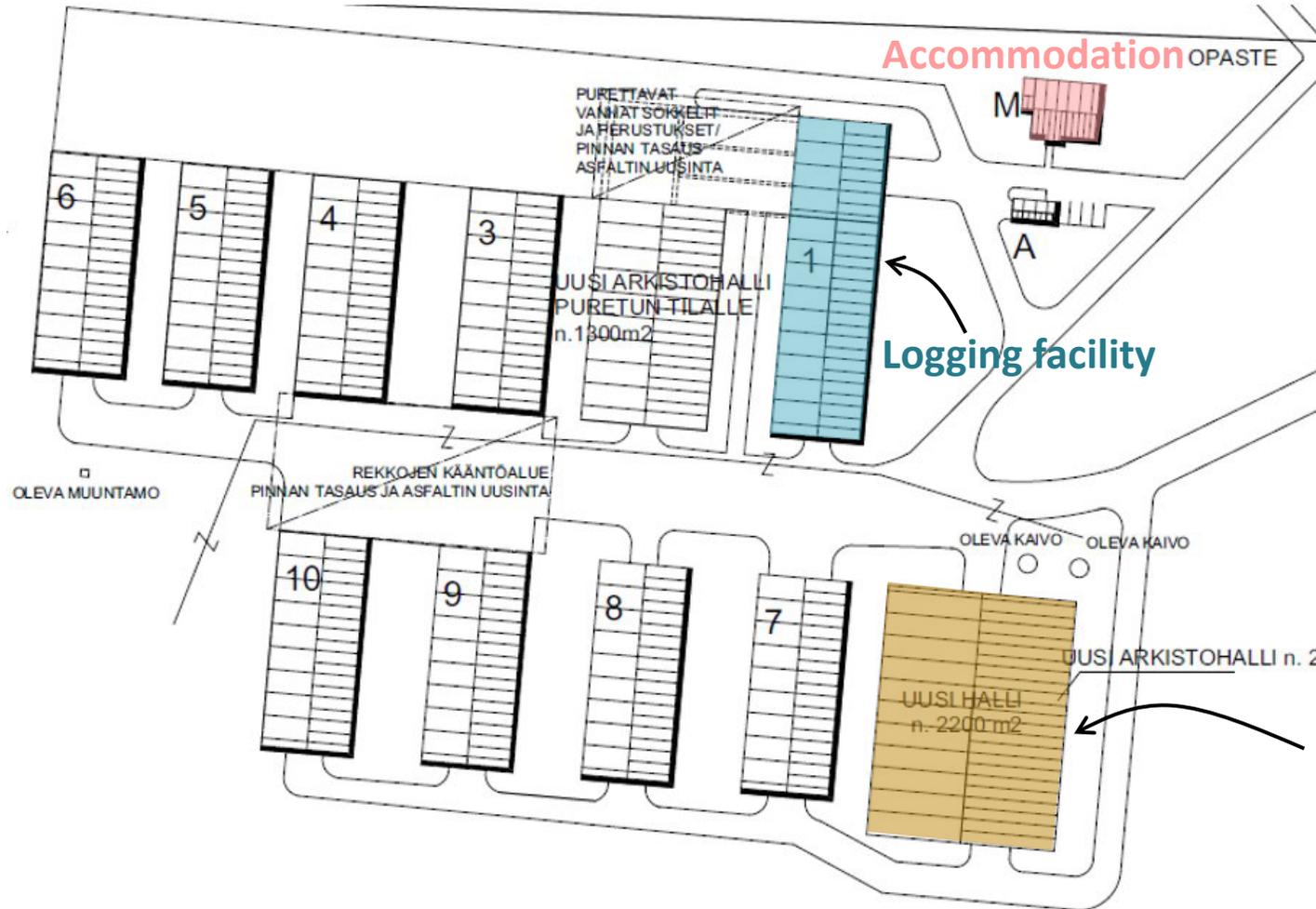


Developing Loppi premises



15.5.2025

Developing Loppi premises



New warehouse (2,200 m2) completed in 2024

Developing Loppi premises

Demolition of the old warehouse (completed)
 Building a new, bigger warehouse (1,300 m²)



**New warehouse completed in 2024
 (2,200 m²)**

Developing Loppi premises

Demolition of the old warehouse (completed)
 Building a new, bigger warehouse (1,300 m²)



New road junction for truck traffic

New warehouse completed in 2024 (2,200 m²)



Dedication of warehouse 10 for geochemical samples

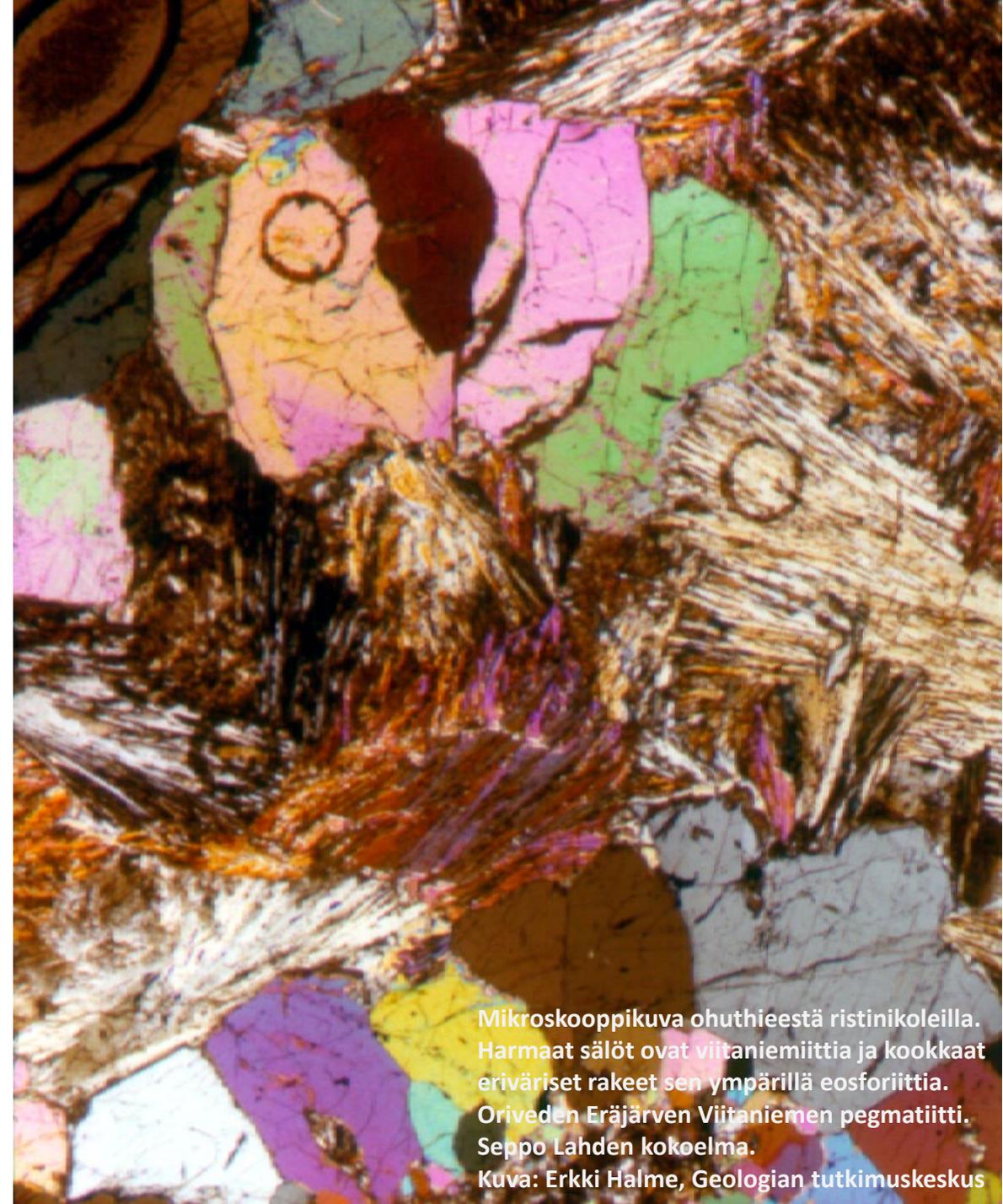


Other Loppi archive improvements for the (near) future

- Full inventory of the sample archive
- Improving the drill core database
 - *Assessment of the non-public status of drill cores*
 - *Adding missing coordinates for improved access*
- Improving the photography options
- Wish list
 - *Improving the logging facilities*
 - *Improving the digital access to drill core information (“digital core archive”)*
 - *Collecting more scanning, measurement and analysis data related to CRMs*

Other news from the sample archives

- Thin section laboratory
 - *GTK hosts a thin section library with more than 150,000 thin sections*
 - *In the future, the library will be in Kuopio*
 - *Improvements to the thin section preparation equipment*
- *Wish list:*
 - *Digital thin section library*



Mikroskooppikuva ohuthieestä ristinikoleilla. Harmaat sälot ovat viitaniemiittia ja kookkaat eriväriset rakeet sen ympärillä eosforiittia. Oriveden Eräjärven Viitaniemen pegmatiitti. Seppo Lahden kokoelma.
Kuva: Erkki Halme, Geologian tutkimuskeskus

Layman's sample operations

- Field-verified and analysed layman's sample information for 2023 published in April
- 2024 samples currently being analysed and verified
- The official layman's sample database does not contain samples from the last years
 - *Extensive in-house software and database improvements in 2024*
 - *Public database updates expected but currently results published yearly*



Geological Survey of Finland
Mineral Economy Solutions
Kuopio
31/2025

April 23, 2025

Layman's Sample Practice in 2023

Jukka Multanen

<https://hakku.gtk.fi/en/publications>

Geologian tutkimuskeskus | Geologiska forskningscentralen | Geological Survey of Finland
Espoo • Kokkola • Kuopio • Loppi • Outokumpu • Rovaniemi
www.gtk.fi • Puh/Tel +358 29 503 0000 • Y-tunnus / FO-nummer / Business ID: 0244680-7

FOR EARTH AND FOR US

The Geological Survey of Finland (GTK) produces impartial and objective research data and services in support of decision-making in industry, academia, and wider society to accelerate the transition to a sustainable, carbon-neutral world. GTK employs more than 400 experts specializing in the mineral economy, circular economy, solutions related to energy, water and the environment, as well as digital solutions. GTK is a research institution governed by the Finnish Ministry of Employment and the Economy, operating in Finland and globally.
gtk.fi/en



@GTK.FI



@GTK



@geologicalsurvey_fi



@GTK_FI



Youtube.com/c/GeologiantutkimuskeskusGTK

