

Otov LCT Pegmatite Project, Czech Republic

High-grade lithium pegmatite potential in the Otov area (Plzeň region), Czech Republic

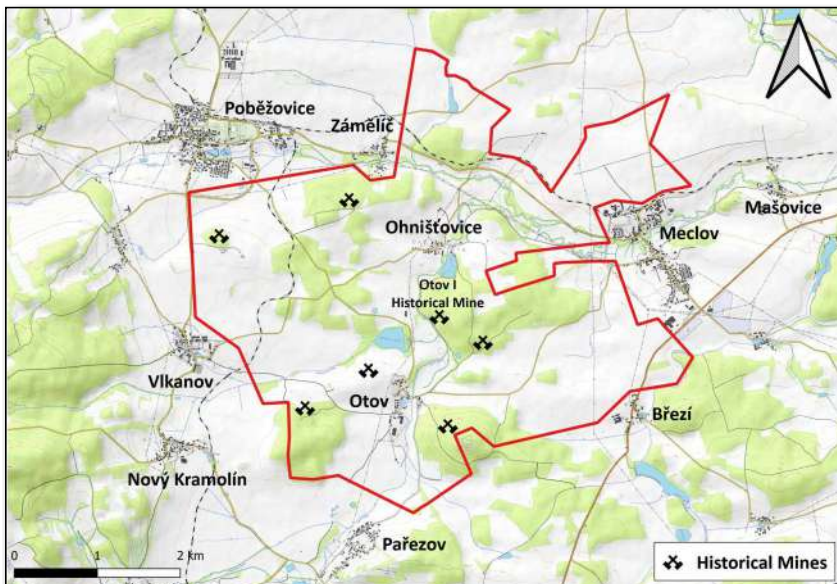
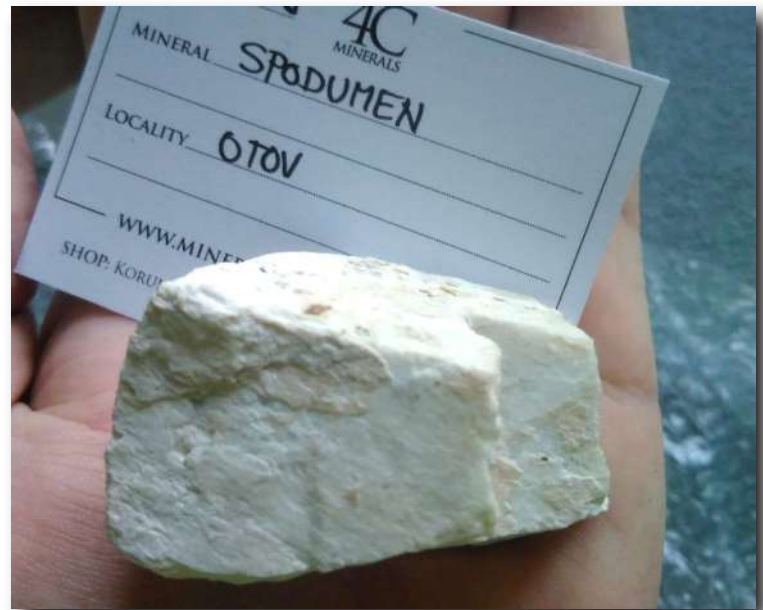


Project Location

- Northern part of the Bohemian Forest, in the western Czech Republic
- Stable government (parliamentary republic), EU member since 2004
- Very good infrastructure
- Clear mining law and legislation
- Long mining and exploration history and tradition

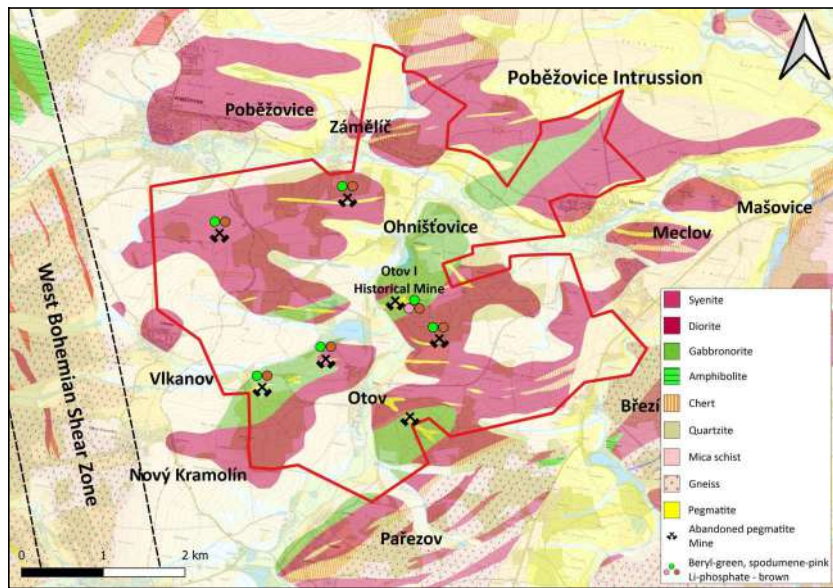
From Concept

- Interpreted back-arc tectonic environment
- Presence of mafic/ultramafic intrusions
- Proterozoic/Lower Paleozoic age
- Within a regional scale tectonic zone
- Known pegmatite bodies (Ksp-Ab-Qtz-Ms)
- Li-Cs-Ta (LCT) pegmatite minerals in the area and in historic workings
- Exploration & Mining history in the area



The Exploration Licence

- Application lodged in Feb 2023
- 18.81 sq. km
- Historical feldspar mines in the licence area
- Including Otov I historical shallow underground feldspar mine with known spodumene
- Number of pegmatite veins with known LCT pegmatite properties
- Best beryl locally in the Czech Republic

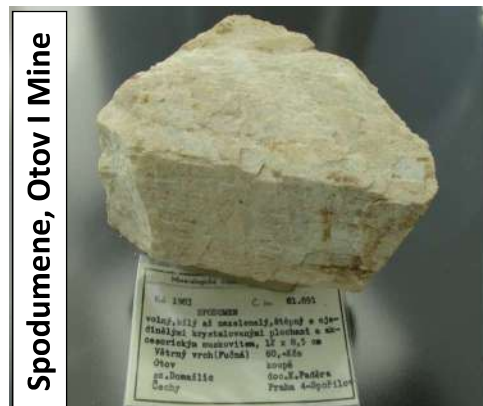
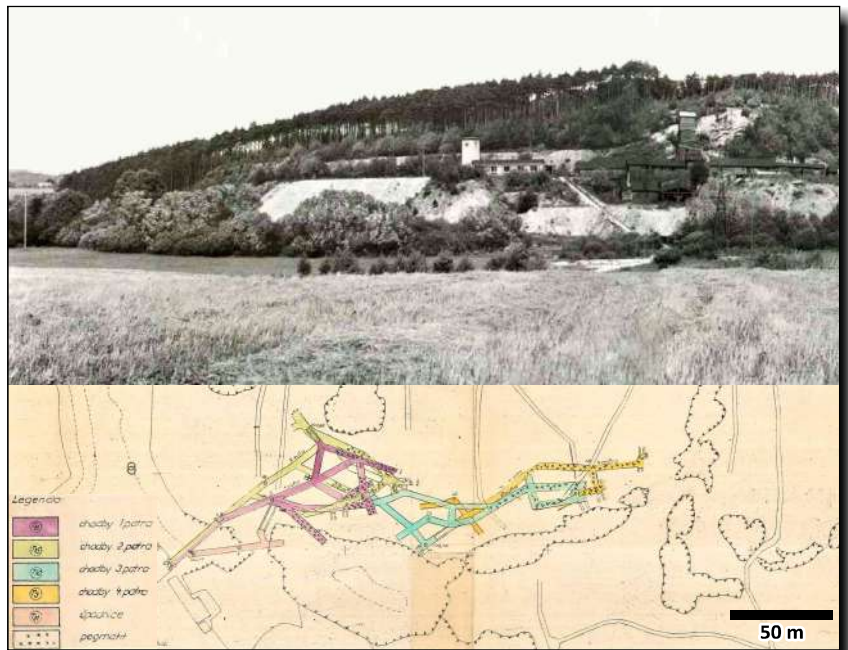


Geology

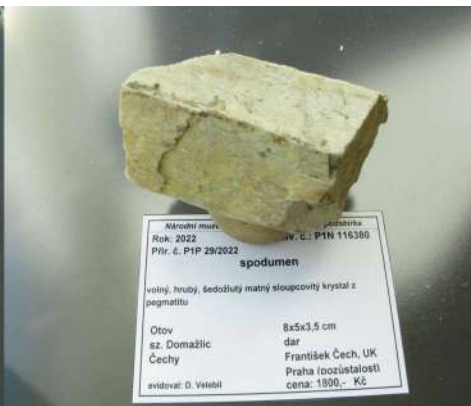
- Lower Paleozoic circular gabbro-norite, diorite, and syenite intrusion
- Surrounded by Proterozoic metasediments
- Intrusion is located near the West Bohemian Shear Zone (major fault)
- Pegmatite veins up to 35 m wide and hundred metres long
- Indication for vertical zonation of the pegmatite veins, LCT minerals more abundant with increasing with depth

Mining History

- Nearly 200 years of feldspar mining history (mainly surface pits)
- Shallow, approximately 50 m deep underground Otov I mine operated up to early 1960s
- LCT minerals increasing with depth decreasing feldspar quality (causing mine closure) -> vertical zonation
- Presence of beryl and spodumene crystals up to 50 cm in length, together with Nb-Ta minerals and cassiterite at lowest 3rd and 4th levels



National Museum Prague
sample 12 x 8.5cm



National Museum Prague
sample 8 x 5 x 3.5 cm



Masaryk University Brno
sample 7 x 4 x 3 cm

Staré Ransko Project, Czech Republic

Magmatic Ni-Cu-Co-PGE Mineralization

A "critical raw materials" project strategically located in the heart of the EU's green energy transition

Nickel-copper mineralization in the Staré Ransko ultramafic-mafic intrusion was discovered by State exploration in the late 1950s, and several low-grade disseminated Ni-Cu deposits were identified near surface. Drilling and underground exploration continued until the mid 1960s when the focus was shifted by the State to Zn-Cu mining which continued through the 1970s-80s. The mineral potential of the intrusion has since remained undeveloped.

Aurum believes that the sparse drilling below 300 m depth combined with developments in geophysical exploration methods and magmatic sulphide deposit models offer a **compelling opportunity to target high impact Ni-Cu-Co-PGE deposits suitable for small footprint, underground mining in alignment with regional sustainability goals.**

- Five year exploration licence includes known disseminated deposits across multiple geological settings within a 3.5 x 1 km trend
- Rich dataset compiled from Czech archives and integrated in 2D & 3D software packages
- Grades up to 4% combined Ni-Cu reported in historical drilling
- Pyrrhotite-pentlandite-chalcopyrite mineralisation associated with troctolites at ultramaficgabbro contact zone
- Exploration model and target selection criteria developed resulting in identification of multiple targets untested by historical drilling
- Geophysical exploration using latest EM technology will target direct-detectable high grade massive sulphide mineralisation
- PGE potential – up to 1 g/t in limited sampling but no systematic assaying

Czech Republic is an EU member nation with well developed transportation, energy and communication infrastructure. The region has a long and rich mining heritage and a skilled labour force. Aurum has a local staff presence with first hand knowledge of the permitting process.



Strategic central European location



Pyrrhotite-rich Ni-Cu mineralization



Easy terrain in sparse spruce forestry

"Raw materials are crucial to Europe's economy. They form a strong industrial base, producing a broad range of goods and applications used in everyday life and modern technologies. Reliable and unhindered access to certain raw materials is a growing concern within the EU and across the globe."

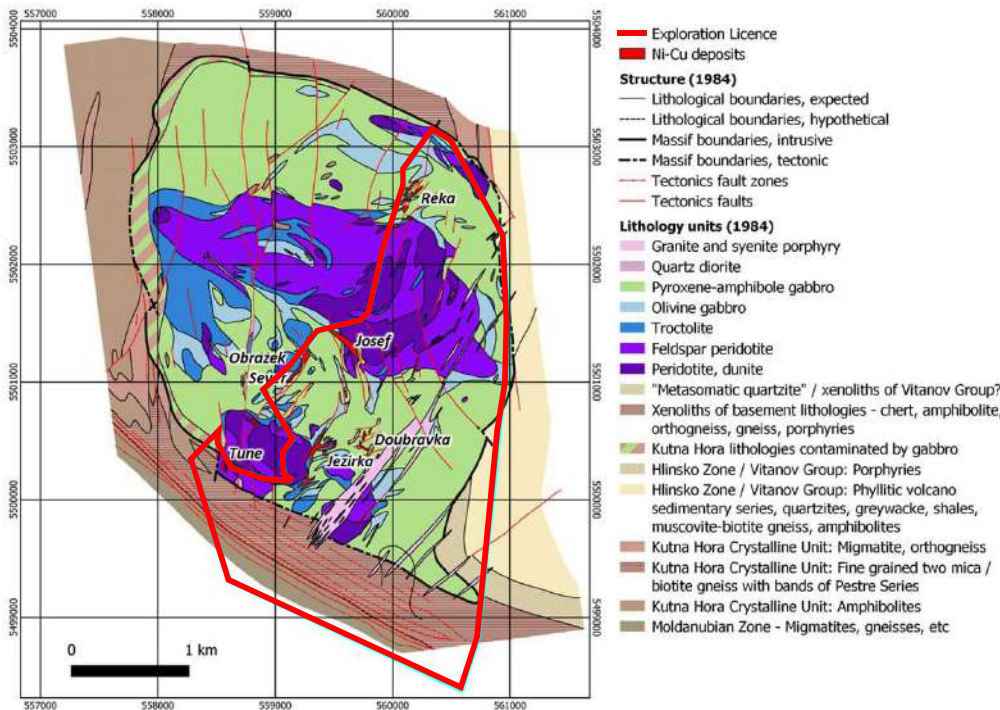
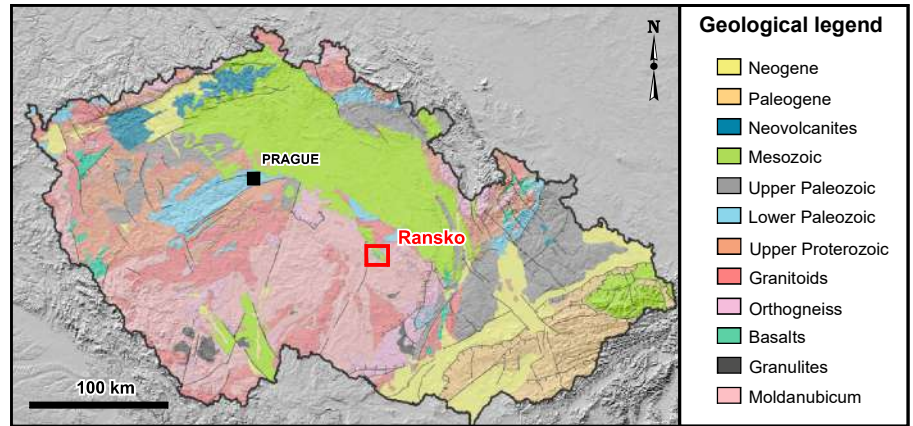
Cobalt and Platinum Group Metals occur at Staré Ransko and are on the 2020 EU list of critical raw materials. Nickel is being monitored by the EU, in view of developments relating to growth in demand for battery storage.





Geology

The Ransko mafic-ultramafic intrusion lies geographically in the middle of the northern edge of the Bohemian-Moravian Highlands (Českomoravská vysočina). This is a “transition zone” between the Moldanubian and Kutná Hora crystalline basement. This is a major boundary between the Bohemian and Moldanubian lithostratigraphic units of the Bohemian Massif.



Mineralization

Sulphides occur in peridotite, troctolite, olivine gabbro and pyroxene gabbro host rocks and cross the boundaries between these units. The best developed mineralization occurs around the contacts between ultramafic blocks and gabbro, typically associated with troctolite bodies formed on the outer margins of the ultramafic blocks. The sulphides are mostly disseminated in nature, with locally developed net textured, semi-massive and massive sulphides.

| | Hole ID | From (m) | Int (m) | ΣNi+Cu (%) | Ni (%) | Cu (%) | Co (%) |
|------------------------------|---------|----------|---------|------------|--------|--------|--------|
| Widest mineralized intervals | RJ19 | 11 | 21 | 0.82 | 0.46 | 0.36 | 0.03 |
| | V25 | 129 | 14 | 0.85 | 0.32 | 0.53 | 0.02 |
| | RJ24 | 53 | 13 | 0.91 | 0.48 | 0.43 | 0.02 |
| | RJ11 | 0 | 18 | 0.63 | 0.43 | 0.20 | 0.02 |
| | V13 | 173 | 12 | 0.89 | 0.49 | 0.40 | 0.02 |
| | RJ23 | 30 | 21 | 0.48 | 0.24 | 0.24 | 0.01 |
| | V115 | 15 | 20 | 0.44 | 0.22 | 0.22 | 0.12 |
| | RJ32 | 23 | 12 | 0.68 | 0.36 | 0.32 | 0.02 |
| | RJ24 | 36 | 13 | 0.58 | 0.31 | 0.27 | 0.02 |
| | V11 | 161 | 13.5 | 0.56 | 0.29 | 0.27 | 0.02 |
| Highest grade intervals | RJ19 | 13 | 5 | 1.30 | 0.76 | 0.54 | 0.03 |
| | RJ19 | 40 | 3 | 1.25 | 0.35 | 0.90 | 0.01 |
| | V25 | 130 | 7 | 0.98 | 0.35 | 0.63 | 0.02 |
| | RJ24 | 58 | 6 | 1.25 | 0.67 | 0.58 | 0.02 |
| | RJ11 | 13 | 5 | 0.94 | 0.69 | 0.25 | 0.03 |
| | V13 | 88 | 4.5 | 1.01 | 0.58 | 0.43 | 0.03 |
| | V13 | 140 | 2 | 1.79 | 0.91 | 0.88 | 0.05 |
| | V13 | 176 | 2 | 1.86 | 1.33 | 0.54 | 0.02 |
| RJ32 | 24 | 3 | 1.28 | 0.7 | 0.57 | 0.02 | |

