



# EMILI MINERAL RESOURCE ANNOUNCEMENT

13 April 2023

Imerys Ceramics France, a wholly owned subsidiary of Imerys S.A (Imerys) is pleased to announce the maiden Mineral Resource Estimation (MRE) for its Exploitation de Mica Lithinifère par Imerys (French: EMILI) lithium project ("EMILI" or "the Project"). The aim of the Project is to evaluate and determine if the Beauvoir granite, the upper 50m of which is currently being quarried for kaolin, contains economically viable amounts of lithium.

## EMILI project Mineral Resource Estimate Highlights

- Mineral Resources have been estimated within the Beauvoir granite intrusion based on the Phase 1 drilling campaign.
- The maiden Inferred Mineral Resource for the EMILI Lithium Project, using a density of 2.65 t/m<sup>3</sup>, is 116.7 million tonnes at 0.90% Li<sub>2</sub>O at a cut-off grade of 0.50% lithium oxide (Li<sub>2</sub>O), with additional elements estimated at 0.13% tin (Sn) and 0.02% tantalum (Ta).

## Imerys

Imerys is a French multinational company which specialises in the production and processing of industrial minerals (the "Company").

Imerys is currently mining kaolin at the Beauvoir kaolin quarry (French: Kaolins de Beauvoir) for use in the ceramics industry.

Imerys is exploring the lithium-bearing potential of the Beauvoir granite, one of two granites present at the kaolin operations, to determine if it has the potential to be developed into an underground lithium mine.

## Property description and ownership

The Project is located in Auvergne-Rhône-Alpes region, central France, approximately 65 km to the west-north-west of Clermont-Ferrand, (Figure 1), in the Allier department. (Source: Google).



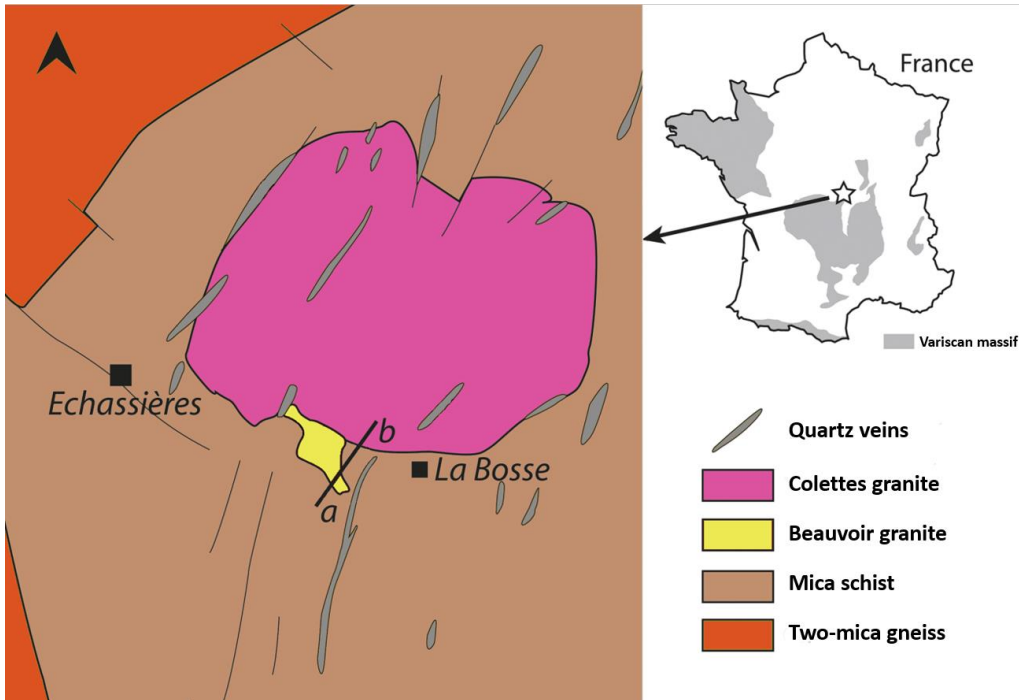
**Figure 1 – Location of Project EMILI**

Access to the Project is via surfaced roads from the villages of Échassières, Lalizolles and Bellenaves or the town of Saint-Éloy-les-Mines.

Imerys has an Exclusive Exploration Permit (French: Permis Exclusif de Recherches - PER) covering an area of 7.6 km<sup>2</sup> to explore for lithium, tin, tantalum, niobium, tungsten, beryllium and associated elements.

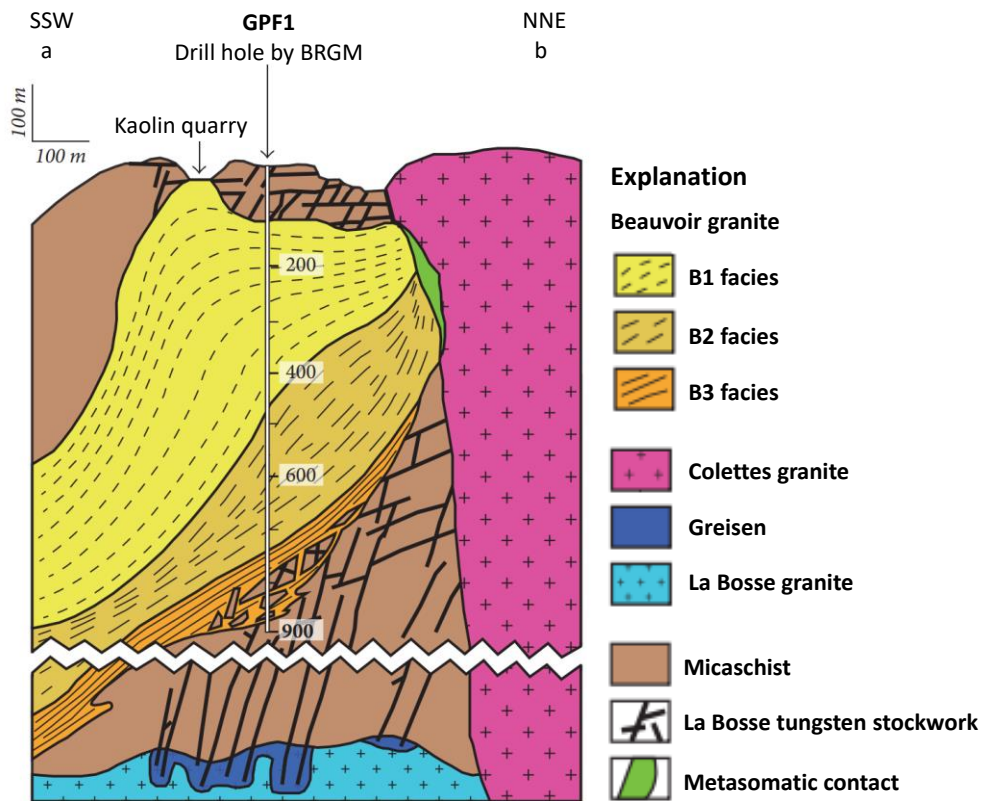
## Geology and mineralisation

The Variscan age (370 million Ma to 290 Ma) Massif Central is composed of three units, the Lower Gneiss Unit (LGU), the Upper Gneiss Unit (UGU) and the Para-Autochthonous Unit (PAU) that have been intruded by various granitic systems emplaced from circa 360 to 290 Ma. Figure 2 is a simplified geological map of the region showing the location of the Échassières granitic complex (modified after Monnier et al., 2018), intruding the PAU.



**Figure 2 – Geological setting of the Échassières granitic complex**

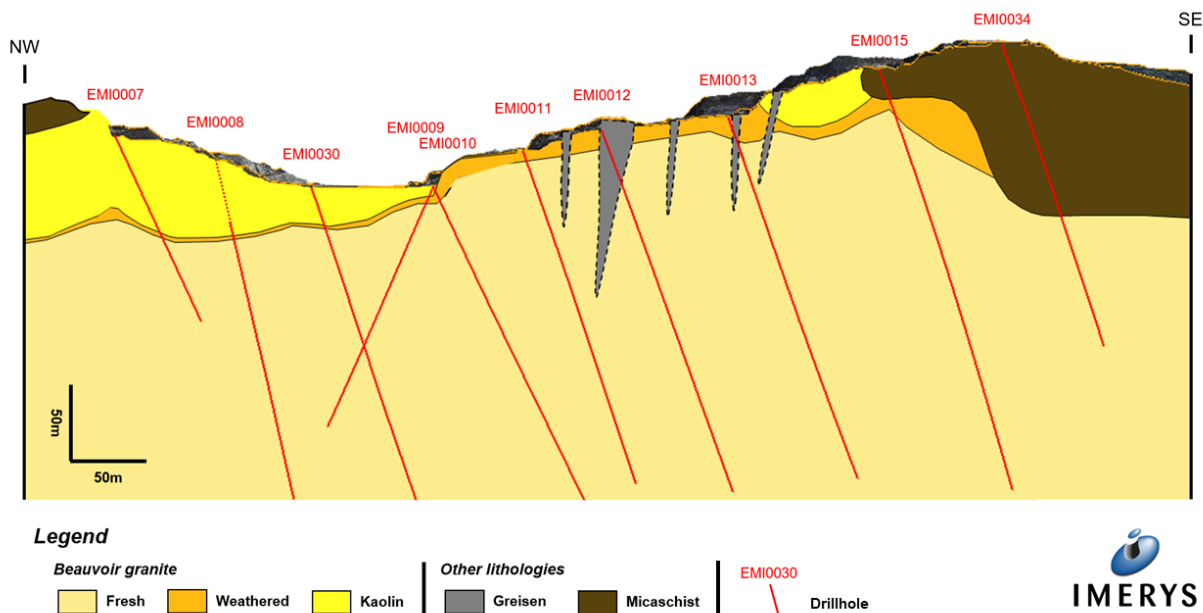
The Project is located in an antiform that hosts the outcropping Colettes and Beauvoir granites. The peraluminous white mica Beauvoir granite has an ellipsoidal expression near surface, around 1800 m long and 520 m wide, with the main axis orientated north-west to south-east, and is genetically linked to the two-mica Colettes granite. Both granites cross-cut the tungsten (wolframite) bearing La Bosse stockwork. They are both affected by hydrothermal episodes resulting in local greisen-like alteration followed by a later stage kaolinization event. An interpretative cross-section of the Beauvoir granite (modified from Cuney et al., 1992) is shown in Figure 3.



**Figure 3 – Interpretative cross-section of the Beauvoir granite**

The Beauvoir granite contains lithium, tin and tantalum mineralisation, while the Colettes granite is barren. Lepidolite, occurring only in the Beauvoir granite, is the principal lithium bearing mineral present in the deposit and is understood to be of primary (igneous) origin (Cuney et al., 1992).

Mining operations are currently extracting kaolin and a tin concentrate from the weathered cupola of the Beauvoir granite, with exploration by EMILI focusing on the unaltered Beauvoir granite that commences approximately 25 to 50 m below the kaolin deposit as shown in Figure 4 (Source: Imerys).



**Figure 4 – Simplified geological cross-section through the Kaolin de Beauvoir open pit.**

## Exploration status

The Beauvoir granite and surrounding micaschists have been exploited for over 140 years for kaolin and tungsten.

The lithium potential of the Beauvoir granite was quantified by the French Geological Survey (Bureau de Recherches Géologiques et Minières – BRGM, French). Formal exploration commenced in 1963 when the BRGM applied for a PER to explore for tin and lithium as well as related metals and minerals. The PER application was updated to include beryllium in 1965. The PER was granted in 1968 and was renewed twice.

The BRGM, as Coframines, entered a partnership with Peñarroya, obtaining a mining licence Permis d'Exploitation (French: PEX) for the deposit in 1979, which was renewed once. A 900 m deep diamond core research hole was drilled in 1985, the results of which demonstrated that lithium, mainly contained in lepidolite, was present in the Beauvoir granite. At that time, economically viable mineralisation was not known, and consequently, the PEX was not renewed.

Imerys acquired the kaolin mining operation in 2005 and in 2015 was granted an exploration permit for lithium, tin, tantalum, niobium, tungsten, beryllium and associated elements. Initial exploration targeted kaolin/granite and micaschist/granite contact identification. Since 2021, Imerys has been undertaking a detailed exploration drilling programme targeting lithium.

Phase 1 of this exploration programme totalled 5000 m of diamond drilling, comprising 20 holes targeting depths of 250 m below the current quarry surface at a nominal grid spacing of approximately 160 m x 160 m. Imerys developed a 3-dimensional geological model, incorporating historical and current drilling data.

Mining industry consultants, AMC Consultants (UK) Limited (AMC), were commissioned to estimate and classify the maiden MRE for lithium, tin and tantalum. Both historic, as well as the Phase 1 (2021/2022), drilling data were considered in the estimate.

## Grade estimation methodology

Grade estimation was carried out using ordinary kriging (OK) as the principal estimation method. Inverse distance weighting squared (IDW2) was used as a secondary estimation method for comparative purposes using the same search parameters as those used for the OK estimates. Grade estimates were made for the Beauvoir granite only. The EMILI block model is shown in Figure 5, looking East. (Source Imerys). The North zone with a medium grade (0.7 - 0.9% Li<sub>2</sub>O) is coloured orange, the South zone with a higher grade (0.9 - 1.1% Li<sub>2</sub>O) is coloured red.

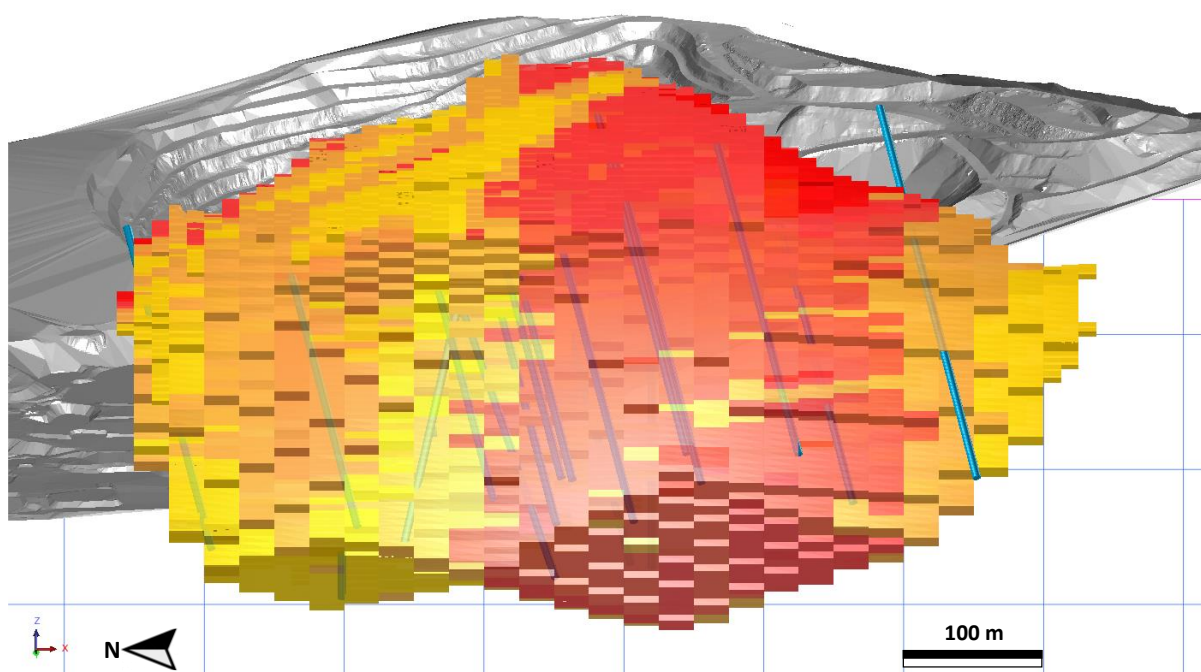


Figure 5 – Phase 1 drillholes and EMILI block model shown below the Kaolins de Beauvoir pit.

## Reasonable Prospects for Eventual Economic Extraction (RPEEE)

The Project has been shown to contain lithium mineralisation, in the form of lepidolite, in sufficient amounts and concentration to demonstrate that there are “reasonable prospects for eventual economic extraction” (RPEEE), as referred to in the 2021 Pan European Reserves and Resources Reporting Committee (PERC) Reporting Standard (PERC, 2021). The Project is located beneath the current open-pit kaolin operation and is planned to be developed as an underground mining operation, that will use long-hole open-stopping (LHOS), with paste backfill.

AMC has prepared a maiden MRE for those areas of the Project that demonstrate RPEEE. AMC has classified the MRE at the Inferred level of confidence and reported it in accordance with the PERC (2021) Reporting Standard requirements.

## Mineral Resource Estimate summary

Table A summarises the MRE for the Project reported in accordance with the PERC (2021) Reporting Standard. The MRE has been limited to those parts of the mineralisation for which there are reasonable prospects for eventual economic extraction using LHOS with paste back fill. The effective date of the MRE is 07 June 2022.

### Table A - EMILI Mineral Resource summary at a 0.5% Li<sub>2</sub>O cut-off grade, 07 June 2022

Classification	Volume (000' m <sup>3</sup> )	Tonnage (000' t)	Density (t/m <sup>3</sup> )	Li <sub>2</sub> O (%)	Sn (%)	Ta (%)
Inferred	44,059	116,757	2.65	0.90	0.13	0.02

#### Notes:

- Mineral Resources are not Mineral Reserves until they have demonstrated economic viability based on a feasibility study or pre-feasibility study.
- The effective date of the Mineral Resources Estimate is 07 June 2022.
- The contained Li<sub>2</sub>O, Sn and Ta represent estimated contained metal in the ground and have not been adjusted for metallurgical recovery.
- Mineral Resources are reported at a cut-off grade of 0.5% Li<sub>2</sub>O based on an LiOH price of EUR 21,450/t (based on an increase of 30% of the long-term price estimate of EUR 16,500/t). Concentrate recovery used is 75% and a refining recovery from concentrate of 87%.
- As the contained Sn and Ta mineralisation has been reported using the Li<sub>2</sub>O cut-off grade, there is no guarantee that these elements can be economically extracted.
- Mineral Resources are reported inclusive of any potential losses due to possible mining methods, such as ground support pillars.
- A standard, average, SG of 2.65 was used for tonnage calculations,
- All tonnes are reported on a dry basis.

## Upside Potential

Potential exists for the estimation and reporting of additional mineralisation. The French geological survey, BRGM, drilled a 900 m deep hole, of which only the lower part, showed a decrease in Li<sub>2</sub>O grade. Only the upper part (300 m) of the Beauvoir granite has been drilled out over a 700 m long area, by Imerys, in the Phase 1 drilling programme.

The EMILI Phase 2 drilling programme was completed in Q1 2023. The programme targeted the vertical and lateral continuation of the mineralisation. The diamond core is currently being logged and assayed for an update of the MRE and to ascertain what drillhole spacing will be required to define Indicated Resources.

The Phase 3 drilling programme, planned to start in Q2 2023, will focus on targeting areas for conversion of Mineral Resources from the Inferred to the Indicated level of classification as inputs into a pre-feasibility level study.

## Conclusions and recommendations

The maiden MRE reported by AMC is supported by the analysis of historical data as well as recent geological mapping, geophysical studies, exploration drilling, and mineralogical testwork. Imerys has demonstrated that the Beauvoir granite, as developed in the Échassières granitic complex, has the potential to contain economically viable concentrations of lithium, contained in lepidolite.

The Competent Person (CP) makes the following recommendations for the next phase of exploration on the Project:

- Undertake infill drilling at a collar spacing of 80 m by 80 m.
- Continue with mineralogical and petrographic studies.
- Both Imerys staff as well as the CP, should undertake site visits to the sample preparation facility as well as the primary and umpire laboratories during Phase 3 exploration drilling.
- The CP should undertake an additional site visit to the Project when Phase 2 drilling data is available, before Phase 3 drilling campaign is to commence.
- Undertake Quantitative Evaluation of Minerals by Scanning Electron Microscopy (QEMSCAN™) and X-Ray Diffraction (XRD) studies on the diamond exploration core, to determine the relationship between lepidolite and other, potential, lithium-bearing minerals.

## Publications

Visit the Project's website (<https://emili.imerys.com/>) to find out more about the EMILI Lithium project located in France.

A summary of the EMILI Mineral Resource Estimation report can be downloaded from this website.

## References

Cuney, M., Marignac C., & Weisbrod A. (1992) - The Beauvoir topaz-lepidolite albite granite (Massif Central, France): the disseminated magmatic Sn-Li-Ta-Nb-Be mineralisation. *Economic Geology*, vol. 87, no. 7, pp. 1766–1794.

Lardeaux J. M., Schulmann, K, Faure, M., Janoušek, V., Lexa, O., Skrzypek, E., Edel, J.B., and Štípská, P. (2014), *The Moldanubian Zone in the French Massif Central, Vosges/Schwarzwald and Bohemian Massif revisited: differences and similarities*, Geological Society, London, Special Publications, Volume 405, Pages 7 – 4.

## Competent Person and site visit

The CP, for Mineral Resources, Mark Burnett, (Principal Geologist, AMC), conducted a site visit to the Project from 7 to 9 March 2022. The CP was accompanied during the site visit by Alan Turner (AMC Principal Mining Engineer), Paul Heaney (Partner and Director, Geohydrology), CSA Global Mining Industry Consultants, Ireland (CSA), and Owen Herold, Imerys Director of Geology.

The Competent Person is independent of both Imerys and EMILI or their directors, senior management and advisers and has no economic or beneficial interest (present or contingent) in the Project, its financing, or the outcome of the Project.

## Competent Person's Statement

As the Competent Person responsible for the information on which the Public Report entitled "EMILI Mineral Resource Estimation Summary Report" is based, I hereby state:

1. My name is Mark Jason Burnett.
2. I am currently employed as a Principal Geologist with AMC Consultants (UK) Limited, Building 3, 1st Floor, Concorde Park, Concorde Road, Maidenhead, SL6 4BY, United Kingdom.
3. I am a member in good standing of the Geological Society of London (Licence #1041787) and the European Federation of Geologists (Licence #1779).
4. I am a graduate of University of the Witwatersrand in Johannesburg, South Africa (Bachelor of Science in Geology (Hons)) and of the University of the Free State in Bloemfontein, South Africa (Master of Science in Mineral Resource Management).
5. I have worked as a professional Geologist for 30 years since graduation in 1992. From 2014 to the present, I have undertaken reviews of hard-rock lithium projects located in Canada, Namibia, South Africa, Ukraine, and Zimbabwe, and have acted as Competent Person for the reporting of exploration results and Mineral Resource estimates for hard-rock lithium projects.
6. I meet the requirements of a "Competent Person" as defined explicitly in the PERC Reporting Standard.
7. I have compiled the Public Report entitled "EMILI Mineral Resource Estimation Summary Report".
8. I conducted a site visit to the Exploitation du Mica Lithinifère par Imerys (EMILI) Project from 7 March to 9 March 2022.
9. The Competent Person is responsible for the content of this Public Report.
10. I am not aware of any material fact or material change concerning the subject matter of the Public Report that is not reflected in the Public Report, the omission of which would make the Public Report misleading.
11. I declare that this Public Report and associated Mineral Resource announcement appropriately reflects the Competent Person's view.
12. I am independent of Imerys Ceramics France.
13. I confirm that I have read all the relevant sections of the PERC Reporting Standard 2021. The Public Report has been prepared under the requirements of the PERC Reporting Standard.
14. I do not have, nor do I expect to receive, a direct or indirect interest in the EMILI Project owned by Imerys Ceramics France.
15. I have no conflicts of interest in respect of the reporting entity Imerys Ceramics France or the EMILI project.
16. At the effective date of the Public Report, to the best of my knowledge, information, and belief, the Public Report contains all scientific and technical information required to be disclosed in order to make the Public Report not misleading.

Dated at Maidenhead, United Kingdom 13 April 2023



Mark Jason Burnett  
Geological Society of London - CGeol (UK), Euro.  
European Federation of Geologists – Euro. Geol (Europe)