## Frontinus-Gesellschaft e.V.

Internationale Gesellschaft für die Geschichte der Wasser-, Energie- und Rohrleitungstechnik



# Cordial Invitation to the Online Lecture (ZOOM) on 12.06.2025, 6:00 pm (CET)

Regula Wahl-Clerici, Lic. Phil.

Wasser im römischen Bergbau im Nordwesten der iberischen Halbinsel an den Beispielen von Las Médulas, Monte Furado und Tresminas

- Eine Vorbereitung für die Exkursion der Frontinus-Gesellschaft im Herbst 2026 -
  - Water in Roman mining in the north-west of the Iberian Peninsula using the examples of Las Médulas, Monte Furado and Tresminas
  - A preparation for the excursion of the Frontinus Society in autumn 2026 (Lecture in German)

Regula Wahl-Clerici has been researching archaeological sites on the Iberian Peninsula since 1985, until 2007 together with her dead husband Jürgen Wahl, with a focus on the 'territorium metallorum Tresminas / Jales'. She studied prehistory and early history at the University of Zurich and specialised early on in the archaeology of the Roman provinces.

In this extraordinarily well-preserved mining zone, not only can the techniques involved in mining and the sophisticated art of the Roman engineers be observed and admired, but a complex water supply system has also been researched over the course of decades of fieldwork. The work resulted in two monographs 'Roman Gold from Tresminas (Portugal). Prospecting, Mining. Treatment' and "Tresminas", numerous articles focussing on mining and hydraulic engineering respectively.

Regula Wahl-Clerici about her lecture

In autumn 2026, the Frontinus Society will organise an excursion to the Iberian Peninsula. During the course of the excursion, the water supply lines of Roman towns, dams and Roman sites for mining with their complex water supply systems will be visited.

The water supply in ancient mining

#### Las Médulas

In Las Médulas, gold was mined from a secondary deposit. Gold particles and nuggets were extracted from the compact gravels of a former watercourse. The Romans developed a highly efficient washing method that allowed the gold to be washed out with great effort. This required the construction of an enormous water supply system. Some of whose aboveground and underground monuments have been preserved.

#### Monte Furado

The "Monte Furado", the pierced mountain, is located near Las Médulas. Around the gold deposited in a river loop, the Romans channelled the river through an artificial tunnel so that the river loop was more or less dry.

### **Tresminas**

In Tresminas, the gold was contained in a primary deposit. Accordingly, mining was carried out both underground and in open-cast mines. Tunnels had to be constructed for extraction and drainage, the latter of which are still in operation today. At the same time, large quantities of water had to be supplied, mainly to treat the mined material and transport it to the village. Of the 12 aqueducts, dams, dam walls, weirs and canal sections of varying lengths, some of which were routed through qanats, have been preserved. The ore washing plants constructed north of the open-cast mines are unique.

Further places visited during the excursion will be briefly described.

Segovia and Tiermes

The aqueduct of Segovia, a World Heritage Site with its weir at the beginning of the canal, is one of the most impressive monuments of antiquity. Less monumental but all the more interesting are the preserved canals, basins and cisterns spread across the settlement, which is partly built into the red sandstone.

Consuegra, Alcantarilla and Melque

Another area to the south of Madrid includes the Alcantarilla and Consuegra dams and the reservoirs of the early medieval Mozarabic monastery of Sta. Maria de Melque.

The access data for the online meeting (ZOOM) are as follows:

https://us02web.zoom.us/j/87933930044?pwd=dlk4REZ4S0NnL3k2RGN2TVdtZTd3Zz09

Meeting-ID: 879 3393 0044, Kenncode: 631844

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