



INTERNSHIP

with Tharsis Mining
& Metallurgy, Huelva, Spain

Melisa Isgró - WACOMA 2019-2021



THARSIS

MINING & METALLURGY

I have completed my 3 months internship in the company Tharsis Mining & Metallurgy, located in Huelva, Spain.

I was looking for internship opportunities in the mining industry because I already had work experience in the sector when Professor María Dolores Basallote Sanchez, from the University of Huelva, encouraged me to perform it with Tharsis Mining & Metallurgy. The work carried out during the internship was key for developing my master thesis called “Unmanned Aerial Multispectral Imagery for monitoring acid mine water in the Iberian Pyrite Belt (Tharsis, Spain)” since I was able to gather the data needed to develop it.

Tharsis Mining & Metallurgy is a Spanish company dedicated to the metal mining sector in the Iberian Pyrite Belt, where it has mining rights with more than 4,500 hectares granted by the municipalities of Tharsis, Alosno, La Zarza and San Telmo. The water quality monitoring is part of the company agenda and I worked in the monitoring of pit lakes, seepage waters, and dams located in the Tharsis mine complex.

The fieldwork involved field campaigns to perform water sampling, through in-situ measurements, laboratory analysis, and drone imagery acquisition. While most of the work implied cabinetwork such as data management, image processing, statistical analysis, and interpretation.

During my internship experience with Tharsis Mining & Metallurgy, I was able to develop my analytical and critical thinking and conflict resolution skills. I particularly found the data processing step to be useful in improving my technical knowledge since I used a variety of processing software such as Pix4D, R, QGIS, SAGA, SPSS, SNAP. The fieldwork was also a great opportunity to see the challenges of the water monitoring campaigns and the amount of work involved in flying drones which couldn't be possible without the support of the University of Huelva and the Drones Laboratory from the University of Cadiz.

Thank you Tharsis Mining & Metallurgy, Dr. María Dolores Basallote Sanchez, and WACOMA for the opportunity!

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