

## **Senior Hydrogeology Consultant**

**Expertise** Water and Environmental Management, Hydrogeology, Mine Dewatering,

Water Resources

**Education** Management, OBS Business School, 2022

Universidad de Barcelona, Barcelona, España

Masters in Water Technology and Management, 2017

UOC y UPC, España

Masters in Environmental Geology and Geological Resources – Hydrogeology

and Soils, 2011

Universidad de Complutense de Madrid, España

Bachelor of Geology, 2009

Universidad del País Vasco, España

## **Professional Experience**

May 2023 – Present Itasca S.A., Santiago de Chile

Senior Hydrogeology Consultant

Nov 2017 – Mar 2023 Corporación Nacional del Cobre - División Ministro Hales, Chile

Senior Hydrogeologist

Mar 2016 – Nov 2017 Compañía Minera Doña Inés de Collahuasi, Chile

Senior Engineer in Hydrogeology and Water Resources

May 2014 – Mar 2016 Compañía Minera Doña Inés de Collahuasi, Chile

Field Hydrogeologist

Mar 2013 – May 2014 SQM S.A, Salar de Atacama, Chile

Field Hydrogeologist

Field Geologist

Feb 2012 – Jul 2013 Geólogos del Mundo - ONGD, Honduras

Geologist - International Cooperation

## **Project Experience**

Hydrogeology for Mining and the Environment: Led the hydrogeology area in different mining operations, with emphasis on depressurization and dewatering of open pits. Responsible for the management and execution of field hydrogeological programs for depressurization of mining pits, pore pressure control on slopes and environmental monitoring (construction of water wells, piezometers, casagrande, horizontal drains, drainage systems). In addition, she has been responsible for the study, design and hydrogeological review of mining plans in different operations. Likewise, she has advised the sustainability areas of different companies for environmental assessment studies, exploitation permits, sectoral permits and environmental impact statements.

Instrumentation for groundwater monitoring and hydrogeological characterization tests in sedimentary aquifers and fractured aquifers: As project manager, led hydrogeological characterization programs with field experience

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## **Amaia Nebrada - ITASCA Chile**



in supervising hydraulic tests during drilling and flow tests (constant and variable) to define hydrogeological parameters (sedimentary, fractured and salt flat aquifers). Led processes for the implementation of monitoring plans for surface and groundwater to analyze the physical and chemical behavior of water. Developed telemetry implementation projects for open pit hydrogeological instrumentation.

Modeling and Groundwater: In the context of hydrogeological studies for the development of mining operations, supervised the development of conceptual and numerical hydrogeological models for open pits. Has been responsible for review and validation of numerical hydrogeological models and predictive simulations for operational and environmental purposes.

Implementation of projects in mining processes: Design and implementation of a dewatering and depressurization system for the open pit at the Ministro Hales Mine, combining pumping well curtains outside and inside the pit in the sedimentary aquifer with subhorizontal drains in the fractured aquifer. Implementation of a wireless telemetry system in the vibrating wire piezometer network of the Ministro Hales Mine, avoiding loss of pore pressure information in sectors without access.

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