

M. FRANCISCA CLEMO GARCIA, M. Sc.

HYDROGEOLOGIST



EDUCATION

M. Sc., Hydrogeology and Modelling, University of Barcelona, Spain, 2024

M.Sc., Oceanography, University of Concepcion, Chile, 2018

Geologist, University of Concepcion, Chile, 2017

Bachelor in Geology, University of Concepcion, Chile, 2016

SUMMARY

Francisca is a Geologist with a Master's in Hydrogeology and Modeling from the University of Barcelona, Spain and a master's in sciences from University of Concepcion, Chile. She has more than eight years of professional and research experience in water resources and 7 years of experience in consulting.

Francisca's experiences include groundwater conceptual and numerical modeling, environmental impact assessments, contamination studies in mining contexts, and brine resource evaluation in salt flats. With experience leading fieldwork teams, developing conceptual models, and constructing 3D geological basin geometry using Leapfrog works software, groundwater flow modelling in porous media (GWV) and calibration (PEST, stochastic and deterministic calibration), she had participated in several due diligence projects. Her technical experience also encompassed project management, water quality sampling programs and QA/QC, and supervision of diamond and sonic drilling, including well construction and hydraulic testing and interpretation.

She has been awarded with different fundings, as the National Geographic Society for Early career Grant and from the international association of Hydrogeologists - Spain chapter.

PROFESSIONAL HISTORY

2025-present:	Hydrogeologist, Robertson GeoConsultants (part of SLR), Canada
2024-2025:	Project Manager, Amphos21, Chile
2023-2024:	Project Coordinator, Amphos21, Chile
2018-2023:	Consultant, Amphos21, Chile
2018-2018:	Laboratory Assistant, Biogeochemistry Lab. University of Concepcion, Chile
2016-2018:	Geology Professor, Andres Bello University, Chile.

PROJECT EXPERIENCE

TYPE OF SERVICE/TECHNOLOGY PROVIDED

Las Tortolas Tailing Impoundment, Chile (present) for Anglo American Sur, Chile

- Update the conceptual hydrogeological model for Ex Bosque sector.
- Support for de EIA defining monitoring programs, zones, and reporting.

Update for the Maricunga Numerical Model (2025), for MSB/CODECO, Chile

- Review of boundary conditions and Li concentrations for the current flow and transport model
- Sensitivity analysis and produce and extract results for differences extraction scenarios.
- Environmental assessment support and main environmental concerns descriptions and strategic planning.

Hydrogeological and Geochemistry Services (2025), for BHP (2025), Chile

- Support in developing and defining porous pressure model for Escondida.
- Support in developing 3D models for contaminations zones.

Lithium exploration Salares Altoandinos project (2024-2025), for ENAMI, Chile

- Conceptual modeling for 3 salt flats, support and lead resources models.
- Support for Due diligence processes, site visits and project descriptions and defense.
- Leading fieldwork exploration campaigns
- Hydrochemistry analysis and QA/QC
- Definition of future exploration campaigns

Support for Due diligence process (2024), for MSB/CODELCO, Chile

- Support for Due diligence processes, site visits and project descriptions and defense to different companies.

Water Resources Advisory Service (2023 – 2024), for CAPSTON COPPER, Chile

- Update and calibration numerical flow models using GWV and PEST.
- Update of conceptual model and 3D modeling for geometry construction.
- Evaluation of conditions for implementation of hydraulic barrier near the tailing impoundment.
- Hydrochemistry and isotopes analysis.
- Analyze of pumping test and interpretation.

Lithium exploration project Salar de Maricunga (2022-2024), for EMSA, Chile

- Develop a hydrogeological conceptual model and 3D geometry construction.
- Assist resource estimation for lithium and potassium.
- Drilling supervision and fieldwork support
- Laboratory management and QA/QC.

Artificial recharge in MNT Aquifer evaluation (2022), for ENAMI, Chile

- Update conceptual model and geological profiles.
- Support in viability analysis for carrying out an artificial recharge project in the Monturaqui – Negrillar – Tilopozo Aquifer

Marco Framework Project (2020-2021), for Anglo American Sur, Chile

- Update conceptual modeling for tailing storage facility Las Tortolas.
- Supervision of DDH drilling and hydraulic testing (Lugeon)
- Geological mapping and lithology description.
- Data analysis and management.

Conceptual and numerical model update for Salar de Pedernales (2021), for CODELCO, Chile

- Conceptual modeling and 3D geometry update.

Analysis and Update Service for the Environmental Water Surveillance Plants, Northern District (2021), for CODELCO, Chile

- Reporting hydrogeological and hydrochemistry monitoring compromises for Environmental Authorities.
- Isotopes studies for Calama basin.
- Data analysis and QA/QC

Due diligence process Maricunga Project (2020), for CODELCO, Chile

- Review of the feasibility study of Lithium Carbonate on Salar de Maricunga Salt Flat.
- Develop of a new hydrogeological model.
- Desing for the future campaign

Environmental services (2019-2020), for Gold fields Salares Norte, Chile

- Environmental reports
- Hydrochemistry analysis and QA/QC

Hydrogeological Services for Brinkerhoff Salt Flat (2018-2019), for CODELCO, Chile

- Hydrochemistry analysis
- Hydraulic test interpretation
- Isotopic analysis
- Water sampling

Hydrochemistry modelling Spence Tailing Deposits (2018), for BHP, Chile

- Hydrochemistry baseline development