
Principal Hydrogeologist

Expertise Hydrogeology, Client Advisory, Project Management, Hydrologic Impact Assessments, Dewatering, Hydrogeologic Field Investigation and Testing, Remediation, Vulnerability and Risk Analyses, Groundwater Flow and Contaminant Transport Modeling, Environmental Impact Assessments

Education M.Sc. (Hydrogeology), 2002
University of South Florida, Tampa, Florida, USA

B.Sc. (Geology), 2000
University of Ottawa, Ottawa, Ontario, Canada

B.Soc.Sci. (Economics), 2000
University of Ottawa, Ottawa, Ontario, Canada

Registration Registered Professional Geologist with the Association of Professional Engineers, Geologists, and Geophysicists of Alberta (APEGA)

Professional Experience

2026 – Present	ITASCA North America, Calgary, Alberta Principal Hydrogeologist
2022 – 2026	AECOM, Calgary, Alberta Senior Hydrogeologist
2021 – 2022	West Earth Sciences Ltd., Calgary, Alberta Manager – Remediation
2019 – 2021	Tervita Corporation/Secure Energy, Calgary, Alberta Senior Project Manager
2016 – 2019	Tervita Corporation, Calgary, Alberta Project Manager
2014 – 2015	Integrated Sustainability, Calgary, Alberta Project Manager/Senior Hydrogeologist
2012 – 2013	Terralogix Solutions Inc., Calgary, Alberta Project Manager/Senior Hydrogeologist
2008 – 2013	AMEC Environnement & Infrastructure, Ottawa, Ontario Project Manager/Senior Hydrogeologist
2006 – 2008	AMEC Earth & Environmental, Calgary, Alberta Project Manager/Hydrogeologist
2002 – 2006	PBS&J, Tampa, Florida Project Coordinator/Hydrogeologist

2000 – 2002

Geologic and Environmental Testing (GET), Tampa, Florida
Field Technician

Project Experience

Physical Hydrogeology and Hydrogeologic Characterization: Over two decades of experience leading complex field and technical investigations across municipal, mining, oil and gas, and infrastructure projects. Previous work in diverse hydrogeologic settings, solving complex hydrogeological problems and implementing challenging field programs, including exploratory water supply programs, construction dewatering evaluations, groundwater seepage studies, and aquifer vulnerability assessments. Conducted deep well injection design and feasibility studies for leachate and wastewater, implemented groundwater control measures, managed recharge and remedial systems, and performed full-lifecycle well management, including drilling, testing, and decommissioning of monitoring, production, and injection wells.

Served as client advisory to support sustainable and environmentally friendly approaches through advanced analysis in geoexchange loop drilling and testing, as well as specialized packer and pump testing programs, including aquifer characterization, pumping and slug testing, hydraulic conductivity analysis, groundwater inflow assessments for major projects, and the development and oversight of groundwater flow and contaminant transport models. Integrated water-level, hydraulic-response, and water-quality data to develop robust conceptual models that directly inform design decisions for clients. A core practice is developing detailed hydrogeologic conceptual models and associated analyses that support planning, design, and risk assessment.

Directed development of geologic models, developed cross sections, and delineated hydrostratigraphic linkages to support water balance and vulnerability mapping. Work included evaluation of recharge systems, landfill effects, and regional groundwater behavior, as well as contributing to regional groundwater model development for major infrastructure and mining projects. Integration of geology, monitoring data, pumping test results, and water quality patterns into coherent conceptual site models that are readily usable and understandable by clients, design teams, regulators, and decision-makers.

Program, Project, and Technical Leadership: Beyond technical delivery, provides high-level leadership across the full consulting lifecycle. Has served as hydrogeological/environmental technical lead for construction projects on major industry portfolios. Experience covers proposal development and costing, risk management and forecasting, program planning, and detailed project management on multi-year, multi-stakeholder programs, including a state-wide technical investigation into aqueduct subsidence in California. Frequently engaged as a trusted advisor to clients, helping them prioritize investigations, frame decisions, and align hydrogeologic work with broader strategic, financial, and regulatory objectives.

Client, Stakeholder, and Regulatory Engagement: Skilled at navigating complex stakeholder and regulatory environments, often acting as the primary liaison between clients, regulators, and community or agency stakeholders. Work includes engagement with groundwater sustainability agencies and state water resources departments, municipal councils, federal parks agencies, and provincial regulators. Led or supported regulatory approvals for discharge and testing programs, developed decommissioning specifications, and guided clients through technically nuanced discussions around groundwater protection, contamination, and infrastructure risk. Represents a communication style that emphasizes clarity, transparency, and practical recommendations, enabling stakeholders to understand hydrogeologic issues and move confidently toward defensible decisions.

Physical Hydrogeology and Groundwater Supply: Led numerous groundwater supply and wellfield development projects, from municipal water systems to industrial and remote sites. Experience includes siting, drilling, construction, and testing of production and observation wells over a wide depth range, as well as evaluating existing water supply wells for yield and suitability. Designed and interpreted pumping tests, step tests, and packer/Lugeon testing in a variety of hydrostratigraphic settings, including various fractured bedrock settings, saprolite, and deep sedimentary aquifers. Work for parks agencies, municipalities, and oil and gas operators has resulted in successful identification of sustainable groundwater supplies, optimization of well performance, and assessment of impacts on adjacent surface water and infrastructure.

Mentoring and Team Development: Invested heavily in mentoring and developing technical staff and teams. Provided guidance on field methods, data interpretation, and project execution while emphasizing quality of life, retention, and professional growth. Helps shape strategy at local, provincial, and national scales, supports cross-departmental collaboration, and builds cohesive teams capable of delivering technically rigorous yet pragmatic hydrogeologic solutions.

Contaminant Hydrogeology and Environmental Monitoring/Remediation: Extensive experience in contaminant hydrogeology, including PFAS, hydrocarbons (LNAPL), and nutrient impacts at industrial and defense sites. Hydrogeological lead and technical specialist on complex contaminated sites, evolving site conceptual models and designing multiple-lines-of-evidence approaches. Work supports remedial options assessments, risk management frameworks, and long-term monitoring programs, including for petrochemical facilities, mines, and fertilizer plants, and interpreting long-term groundwater and surface water data, linking source–pathway–receptor relationships, and advising on cost-effective remedial strategies that meet client liability-reduction goals.