

Tara Raketti, EIT

ENVIRONMENTAL ENGINEER



EDUCATION

B.Sc., Environmental Engineering, University of British Columbia & University of Northern British Columbia, 2014
B.Sc., Animal Biology, University of British Columbia, 2008

AFFILIATIONS

Association of Professional Engineers and Geoscientists of B.C. (Canada), Engineer-In-Training

EXPERIENCE

SUMMARY

Tara Raketti has a B.Sc. in Environmental Engineering and in Biology and has nine years of professional experience in mining hydrogeology and environmental analyses. Tara joined Robertson GeoConsultants Inc. in 2013.

Tara's technical experience includes development of water and load balance models, both in Excel and GoldSim, to support mine closure planning. She is well-practiced in supervision of both Dual-Rotary and Sonic drilling, well construction and development, and hydraulic testing and analysis. She has managed large multi-year drilling programs with budgets exceeding US\$ 1 million. Tara has also managed her own water quality sampling programs and is well-seasoned in groundwater and surface water sampling.

PROFESSIONAL HISTORY

2013-present: Environmental Engineer, EIT, Robertson GeoConsultants Inc.
2011-2012: Co-op Student, Knight Piésold Ltd.

PROJECT EXPERIENCE

HYDROGEOLOGY STUDIES

Anvil Range Mining Complex (Faro Mine), Yukon (2014-present) for YG AAM/CIRNAC

- Investigate sources and magnitude of contaminant loading to the Rose Creek Diversion Channel along the Secondary Dam
- Provide site supervision for various drilling programs and act as point person for client liaison
- Supervise Sonic drilling programs and monitoring well installation for groundwater quality monitoring and characterization of the local aquifer
- Complete groundwater well development and sampling for newly installed monitoring wells
- Supervise hydraulic testing of pumping wells in the Down Valley area
- Assess performance of existing seepage interception systems (S-cluster SIS)
- Compile and visualize data of routine groundwater quality monitoring across the Anvil Range Mining Complex (Faro, Grum and Vangorda) for annual monitoring reviews (over 150 wells)

Las Tortolas Tailings Impoundment, Chile (2013 - present) for Anglo American Chile

- Supervise and manage a large multi-year drilling program as part of a comprehensive hydrogeological investigation to support design and implementation of a seepage interception system and aquifer remediation
- Directly supervise Dual-Rotary drilling and the construction and development of both monitoring and pumping wells in four sectors of the mine site
- Supervise and analyze pumping tests to characterize the local aquifers to support permitting of pumping wells and groundwater modeling

Rum Jungle Mine, Australia (2015-2016) for Northern Territory Department of Mines and Energy

- Compile, QA/QC and visualize groundwater level and quality data in support of hydrogeological modeling study

Myra Falls Mine, BC, Canada (2014-2017) for Nyrstar

- Kick-off drilling investigation program and train junior staff on Sonic drilling supervision
- Compile, QA/QC and visualize groundwater level and quality data to support of hydrogeological modeling study

WATER AND LOAD BALANCE STUDIES

Los Bronces Mine, Chile (2020) for Anglo American Chile

- Develop a water and load balance model to characterize current water quality in the Rio San Francisco and within the Los Bronces mining district to better understand natural and mine-related ARD contaminant sources to the environment

Myra Falls Mine, BC, Canada (2018-2020) for Nyrstar

- Combine the operational and closure water balance models in GoldSim with integration of groundwater modeling results to characterize current loading to Myra Creek and provide future predictions of contaminant loading to the creek

Rum Jungle Mine, Australia (2018-2019) for Northern Territory Department of Mines and Energy

- Update a site-wide water and load balance model with integration of groundwater modeling results to characterize current site conditions and predict changes during and after rehabilitation (GoldSim)

Anvil Range Mining Complex (Faro Mine), Yukon (2016-2018) for YG AAM/CIRNAC

- Update a water and load balance study for the Rose Creek Tailings Storage Facility to assess contaminant loading to Rose Creek aquifer and receiving surface water
- Assist with surface water sampling for streamflow surveys for load characterization

El Soldado Mine, Chile (2016) for Anglo American Chile

- Develop a water and load balance model for the El Torito tailings impoundment, requiring the compilation, QA/QC and visualization of operational pumping rates and water quality data of all associated inflow and outflows

MINE WASTE CHARACTERIZATION

Myra Falls, BC, Canada (2015) for Nyrstar

- Conduct various field scale investigations on waste rock samples to characterize the physical and geochemical properties for mine rehabilitation and planning

Rum Jungle, Australia (2014) for Northern Territory Department of Mines and Energy

- Investigate the physical and geochemical properties of waste rock for relocation during mine rehabilitation

ENVIRONMENTAL & BASELINE STUDIES

Ovejeria, Chile (2015) for Codelco Andina

- Conduct review of international water quality standards and guidelines with focus on sulphate

TRO Water Balance, Alberta, Canada (2013-2015) for Suncor

- Conduct field monitoring of polymer-treated Mature Fine Tailings for evaluation of the Optimized Seasonal Deposition approach
- Provide assistance with research of the freeze-thaw and dewatering processes of polymer-treated Mature Fine Tailings

Ajax Project, BC, Canada (2012) for KGHM International

- Coordinate and conduct groundwater and surface water quality sampling programs as part of a baseline data collection program
- Perform hydrology field assessments including stream gauging and benchmark surveys
- Produce a hydrometeorology report summarizing local baseline environmental conditions

Spanish Mountain Project, BC, Canada (2012) for Spanish Mountain Gold Ltd.

- Implement groundwater sampling program as part of a baseline data collection program
- Complete desktop analysis of flow reduction of local watercourses for investigation of alternative operational flow options

Aley Niobium Project, BC, Canada (2012) for Taseko Mines Ltd.

- Conduct environmental field investigations including surface water sampling, hydrology discharge measurements, and snow course survey

Box Canyon Hydroelectric Project, BC, Canada (2012) for Box Canyon Hydro Corp., Sound Energy Inc.

- Complete desktop preliminary analysis of habitat conditions for Cutthroat rearing and Steelhead spawning along sensitive transects during baseline and operational flows

Elk Gold Project, BC, Canada (2012) for Gold Mountain Mining Corp.

- Compile and perform QA/QC analysis of historical database of water quality data for development of baseline studies sampling program

Eagle Gold Project, Yukon, Canada (2011) for Victoria Gold Corp.

- Compile and perform QA/QC analysis of historical database of water quality data for development of baseline studies sampling program

GEOTECHNICAL STUDIES

Schaft Creek, BC, Canada (2011) for Copper Fox Metals Inc.

- Supervise diamond drilling program and perform oriented core logging and data summary as part of a pre-mine feasibility study