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**Project Hydrogeologist**

**Expertise** Hydrogeologic Site Characterization/Conceptual and Numerical Hydrogeologic Model Development, Mining Hydrogeology, Multidisciplinary Field Investigation

**Education** B.S. (Geophysics), 2017  
University of South Carolina, Columbia, South Carolina, USA

**Professional Affiliations** Member: Society for Mining, Metallurgy & Exploration (SME)

**Certifications** MSHA (Mining Safety and Health Administration)

**Professional Experience**

- 2022 – Present ITASCA Denver, Lakewood, Colorado  
Project Hydrogeologist
- 2018 – 2022 SRK Consulting, U.S., Inc., Colorado Geoenvironmental, Denver, Colorado  
Consultant (Hydrogeology)
- 2017 – 2018 Reservoir Group (Denver-Julesberg Basin), Denver, Colorado  
Mudlogger/Wellsite Geologist

**Project Experience**

Hydrogeologic Site Characterization: Mr. Radtke has over five years of experience in conducting and supervising hydrogeologic investigations for site characterization for projects in the U.S., Canada, Mexico, Colombia, Bolivia, and Chile. Duties have included conceptual hydrogeologic model development, hydraulic and environmental data analysis and management, field program design and implementation, and numerical groundwater flow modeling using *MINEDW* and *MODFLOW-SURFACT*. Tasks have involved mine dewatering, water supply, resource evaluation, environmental impact and remediation, pit slope stability, rapid infiltration, and tailings dam integrity studies.

Multidisciplinary Field Investigations: He has extensive experience in coupling multiple technical disciplines (e.g., hydrogeologic, geotechnical, geochemical) into one field program while adhering to local and federal environmental and safety regulations. Duties have included hydraulic testing (pumping, packer, airlift, slug, and injection/infiltration testing), production/monitoring well design and installation, vibrating wire piezometer installation, RMR89 geotechnical core logging, USCS soil logging, surface water containment, and water quality and geochemical sample collection.

Projects and Commodities: His experience consists of numerous mining projects throughout the world. Projects have included Spodumene pegmatite lithium in North Carolina; lithium brine resources in Nevada, Bolivia, and Chile; gold oxide deposits in Nevada, Mexico, and Colombia; PGMs in South Africa; kimberlite diamonds in Canada; and legacy asset closure operations of copper mines in Arizona.