



JOB TITLE: Hydrogeologist

LOCATION: Salt Lake City, Utah initially. Milford or Delta, Utah during construction

APPLY TO: jobs@peakminerals.com

COMPANY INFORMATION

Peak Minerals is a wholly owned subsidiary of EMR Capital, a specialist resources private equity manager. Peak Minerals is actively developing its world-class sulfate of potash (SOP) project on the Sevier Playa in west-central Utah and is focused on delivering plant nutrition in a safe, responsible, and environmentally conscious way.

The Sevier Playa Project (Project) in Millard County, Utah, is the most significant SOP development project in North America. Peak Minerals 's mission is to become the highest-quality and lowest-cost SOP producer in North America. This will enable the region to become self-sufficient in chloride-free potassium fertilizers that help farmers increase high-value food production to feed North America's growing population.

Peak Minerals is committed to developing a modern fertilizer project with attractive economics while making a positive environmental impact and maintaining socially responsible operations. The Sevier Playa project will use solar energy to economically extract SOP, minimizing Peak Minerals 's environmental footprint while producing a natural, organic product. Construction is expected to commence during Q4 2023 to Q1 2024.

PURPOSE

The Hydrogeologist will provide technical input for the Project, covering all aspects of brine and water resources hydrogeology and hydrology, to include: borehole design and pumping test analysis; groundwater flow and solute transport modelling; water resource planning; environmental assessment; and water quality assessment. The individual will collaborate with multi-disciplinary teams to optimize output from company operations and help ensure successful development of the Project.

DUTIES AND RESPONSIBILITIES

- Develop in-house capabilities to model brine resource recovery, including the management of groundwater flow and solute transport models and mine plan simulations.
- Develop and conduct groundwater modeling using a variety of modeling platforms (MODFLOW, FEFLOW, LeapFrog etc.).
- Conduct aquifer testing (slug tests and pumping tests) and data analysis. Interpret analytical laboratory results.
- Perform data analysis and data visualization utilizing GIS, Surfer, or other three-dimensional data-visualization software.

- Provide technical advice and consultancy on Sevier River recharge water supply and transmission losses.
- Complete Project related water balances.
- Manage all historic and future hydrogeologic databases.
- Conduct fieldwork to include trench-to-trench aquifer pump testing, drilling supervision, well testing, groundwater monitoring, and environmental inspections.
- Visit construction sites to collect water samples and perform analyses.
- Coordinate all health and safety requirements for hydrogeology programs.
- Complete regional hydrogeology desktop studies to be reviewed by senior staff.
- Project planning including scope, schedule, and budget.
- Provide technical advice and consultancy on complex hydrogeological matters such as analysis of designs and assessments, investigations, and water quality studies.
- Plan, schedule, conduct, or coordinate detailed phases of work as a part of the Project.
- Execute groundwater desktop studies, investigations, test programs, well installations, and pump and hydraulic testing.
- Manage specific elements of the Project with potentially significant budget and complexity under the general direction of the Construction Project Manager.
- Support writing of technical proposals and reports.
- Fulfill Project Manager roles such as planning, execution, and delivery of hydrogeology-related projects.

QUALIFICATIONS

A bachelor's degree in hydrogeology, or a closely related field is required. A minimum of five years of hydrogeologic or environmental project experience as well as relevant experience in hydrogeology is necessary. Experience with groundwater and/or contaminant transport modeling (GW Vista, FEFLOW, MODFLOW- Surfact, and AQTESOLV) is essential. Professional registration as a PG or PE is preferred. The chosen candidate must demonstrate experience relating to groundwater modelling and groundwater resource development.

Proficiency in geology, hydrogeology, and contaminant transport and fate analyses is required. Experience with hydrogeological characterization work including aquifer test design and analysis and technical report writing is required. Knowledge of ArcGIS, AutoCAD and related GIS programs is required. Professional licensure and/or certification is mandatory. Academic or consulting experience in hydrogeologic data collection, groundwater sampling, hydrogeologic testing and analysis, and numerical groundwater flow modeling is desired.

This role requires interstate travel, thus the candidate must be mobile and willing to work on a combination of field site and office work.

ORGANIZATIONAL FACTORS

The Hydrogeologist will report to the President and CEO until an Operations Manager has been hired.

SKILLS AND ABILITIES

- Demonstrate experience with groundwater modeling, groundwater resource development, density-dependent flow and dual-domain mass transport, and surface water modeling.
- Exhibit strong technical writing skills, experience writing environmental documents and reports, and performing field work.
- Ability to work in a fast-paced environment and be an energetic and enthusiastic coach/mentor to others.
- Demonstrate excellent verbal and written communication skills with an ability to interact effectively at all levels of an organization.
- A high level of efficiency, including the capacity to prioritize and manage time effectively.
- Present as a professional and ethical individual with strong interpersonal skills.
- Must be able to cope with pressure and possess the necessary motivation and tenacity for the demands of the position.
- Possess strong numeracy, mathematical modeling, analytical, organization, and problem-solving skills.
- Display scientific knowledge from a variety of disciplines.
- Must demonstrate initiative, flexibility, and creativity.
- Valid driver's license.
- Experience with brine mining projects and potash production or similar resource project would be well regarded.