

## Senior Hydrogeologist

### Summary

Mr. Philipp has over 13 years of experience working as a hydrogeologist on a variety of environmental issues including clean water projects and contaminated facilities. His project experience ranges from the general evaluation of site-specific hydrogeologic conditions, examination of surface water and groundwater interactions, and the design and implementation of remedial actions utilizing the full range of technology options. Mr. Philipp has 7 year experience working on the detailed hydrogeologic evaluation of surface water and groundwater interactions in a coastal river environment in support of a water rights claim. Other hydrogeologic projects include modeling of groundwater systems and evaluation of efficiency of water supply wells. A synopsis of select project experience is presented below.

### Project Experience

- Mr. Philipp provided technical support and project management on a large-scale hydrogeologic investigation near Big Sur, California. He studied the interaction between groundwater, surface water and oceanic systems to assess the potential adverse impacts from agricultural pumping in the area. He designed and led the implementation of three six-month investigations that included the collection of water quality parameter data, river stage and flow data, tide data, etc. The latest field investigation included the deployment of over 25 transducers into wells and custom designed piezometers designed to measure groundwater flux across the bed of a river. Mr. Philipp prepared the Hydrogeologic Investigation reports, which have been successfully subjected to intense third party and expert review.
- Hydrogeologist on several projects with the goal of optimizing water supply wells for water recovery while minimizing the uptake of contaminants such as nitrate. This included the collection of water flow and contaminate concentration data profiles down each well and integrating the data. This would lead to the identification of water bearing zones contributing the greatest concentrations of contaminants and ideally to the development of well modifications to optimize output while minimizing or eliminating treatment costs.
- Hydrogeologist on preliminary groundwater modeling project to determine the mechanism and timing of a release of nitrates and the uptake of nitrates into a municipal water supply well. Model was a multilayer transient transport model that was calibrated to a known dataset. Model was used to test feasibility of nitrate transport to the well location and to estimate cleanup times/costs based on elimination of source area.
- Mr. Philipp provided field oversight for collecting groundwater quality data in close proximity to a residential supply well in order to assess the potential effects of pumping a nearby city water supply well on water quality in neighboring residential water supply wells. The work conducted included the collecting water samples at depths ranging from 100' bgs to 200' bgs using hollow stem auger technology. Special conditions included limits on drilling technology due to the proximity of a residential supply well and the use of tracers to determine the amount of mixing between formation water and water added by the drilling process.
- Mr. Philipp completed a technical analysis of well pumping test data within the Port of LA. The test results determined the aquifer characteristics needed to design a successful dewatering program for a future construction project.

### Education

M.A., Geology, Johns Hopkins University, 1996.

B.S., Geology, State University of New York at Stony Brook, 1994.

### Registrations/Certifications

State of California, Registered Professional Geologist (Reg. No. 7945) 2005

State of California, Certified Hydrogeologist (Reg. No. 864) 2006

40-Hour OSHA Health & Safety Certification (29 CFR 1910.120)

8-Hour OSHA Supervisor's Certification

First Aid/CPR Training

### Professional Training and Continued Education

GRA – "Principles in Groundwater Flow and Transport Modeling" Short Course – 2006.

### Professional Memberships

Groundwater Resources Association