

EDUCATION

B.S. The Pennsylvania State University. 1998. Geoscience.

Senior Thesis: "Search for Fossil Meteorites." With the aid of large mining operations, various magnetic rocks were prepared and analyzed for iron meteorite characteristics.

Continuing Education:

- National Ground Water Association. June 11-13, 2001. "Design and Analysis of Aquifer Tests Including Slug Tests and Fractured Flow."

Certification:

- Hazcom International, Inc. 40-hour Health and Safety Training. September 1999. Clairton, Pennsylvania.
- Waste Site Worker Supervisory Training in Accordance with 29CFR 1910.120(e)(4). April 27, 2001.
- Hazardous Waste Site Worker Refresher Training (8 hours annually) in accordance with 29CFR 1910.120(e)(8), State College, PA.
- Mine Safety Training in Accordance with MSHA 30CFR Part 46, Training/Retraining of Miners. May 31, 2002, plus annual Miner Refresher Course.
- American Safety and Health Institute Approved Basic First Aid and Adult CPR Certification, plus annual re-certification.
- Permit-Required Confined Space Training, Including Entrant, Attendant and Supervisor Non-Entry Rescue. August 2, 2004.

EXPERIENCE

April 1999 to March 2008; August 2012 through October 2013; August 2019 through present:
Staff Geoscientist and Project Hydrogeologist (P.G.), Meiser & Earl, Inc. State College, Pennsylvania. Responsible for completing in-field data collection and related project management in the office for the water supply, mining, and waste management industries, including:

- Conduct constant-rate and step-drawdown pumping tests for aquifer analysis and regulatory compliance;
- Program and utilize pressure transducers, environmental dataloggers, water-level probes, weirs, flumes, and borehole video cameras;
- Perform sampling and monitoring ground-water and surface-water using flow meters; specific conductivity and pH meters; bailers; air-lift systems; centrifugal pumps; submersible pumps, including the 2-inch diameter Grundfos variable-rate pump, and various gas monitoring equipment;
- Provide project oversight of drilling operations for water-supply wells, monitoring wells, and test wells using air-rotary rigs, for the purpose of logging lithology and water-bearing zones within the sub-surface;
- Perform soil sampling using split-spoon auger and geoprobe methods;
- Perform computer processing of field data, and construction of geologic cross sections and contour maps;
- Author hydrogeologic reports for compliance under Pennsylvania Department of Environmental Protection and the Susquehanna River Basin Commission regulations.

November 2013 through July 2019: Hydrogeologist (P.G.), Self employed, State College Area, Pennsylvania. Responsible for completing in-field data collection and related project management in home office for the water supply, and waste management industries, including:

- Conducted constant-rate and step-drawdown pumping tests for aquifer analysis and regulatory compliance;
- Programed and utilized pressure transducers, environmental dataloggers, water-level probes, weirs, flumes, and borehole video cameras;
- Performed sampling and monitoring ground-water and surface-water using flow meters; specific conductivity and pH meters; bailers; air-lift systems; centrifugal pumps; submersible pumps, including the 2-inch diameter Grundfos variable-rate pump, and various gas monitoring equipment;
- Provided project oversight of drilling operations for water-supply wells, monitoring wells, and test wells using air-rotary rigs, for the purpose of logging lithology and water-bearing zones within the sub-surface;
- Performed computer processing of field data, and construction of geologic cross sections and contour maps;

- Authored hydrogeologic reports for compliance under Pennsylvania Department of Environmental Protection and the Susquehanna River Basin Commission regulations.

February 2010 through July 2012: *Hydrogeologist, Walla Walla Basin Watershed Council, Milton-Freewater, Oregon.* www.wwbwc.org The WWBWC is a non-profit organization formed in 1994 to promote local decision making and local involvement of conservation and watershed enhancement projects and outreach.

- Served as the lead technical manager for WWBWC activities related to basin hydrology and hydrogeology.
- Further developed an aquifer recharge program that promotes the retention of higher surface water flows within the basins aquifer for summertime benefit to ecology and agriculture.
- Interfaced and collaborated with valley stakeholders and regulators develop restoration projects to promote water availability, water quality and sustainable land-use.
- Secured approximately \$600,000 in grants funding and aided in the acquisition of another \$800,000 to \$900,000.
- Sat on the valley's Water Resource Panel that serves to review proposed changes in water management and promote long-term sustainability of its resources.

March 2008 to August 2009: *Project Analyst, Environmental Credit Corp., State College, Pennsylvania.* Environmental Credit Corp. (ECC) is a project developer of greenhouse gas reduction projects, and serves as an aggregator of carbon credits (typically registered as offsets in the voluntary carbon market).

- Served as a senior level technical advisor for the company. Reviewed numerous quantification methodologies utilized to develop greenhouse gas reduction and energy efficiency projects in the agricultural, waste, and coal mine industries.
- Aided in the development of a quantification methodology for the avoidance of landfill-methane generation - in the form of a composting operation, for example. This protocol has become an approved Offset Protocol for the Chicago Climate Exchange.
- Involved in the development of protocols for several energy-efficiency projects related to reduced natural gas usage and electricity consumption. As a geologist, I spent substantial time researching geologist sequestration on the company's behalf.
- Developed internal tools and models used for the quantification of credits that ECC's projects generate.

March 1998 to January 1999: *Project Manager, Antarctic Network of Unattended Broadband Integrated Seismometers (ANUBIS) Project, The Pennsylvania State University, University Park, Pennsylvania.* Handled all logistical support including: ordering and receiving of components, building of custom electronic components for six seismic stations. Traveled to Antarctica to install eight remote, self-sufficient, passive seismic stations.

August 1991 to December 1993: *Enlisted Soldier, United States Army, Ft. Sill, Oklahoma and Germany.* Multiple Launch Rocket System (MLRS) Crewmember, responsible for the completion of various duties as an assistant squad leader.

PRESENTATIONS

- American Water Resources Association (AWRA) Annual Water Resources Conference - November 2011, Albuquerque, New Mexico. Presenter - Restoring Floodplain Function and an Alluvial Aquifer in a Distributary River System: Managed Aquifer Recharge through Surface Infiltration in the Walla Walla Valley.
- Washington State Water Resources Association, Annual Conference, December 2011. Workshop Presenter - Restoring Floodplain Function and an Alluvial Aquifer in a Distributary River System: Managed Aquifer Recharge through Surface Infiltration in the Walla Walla Valley for Agricultural, Environmental, and Economic Benefit.
- Pacific Northwest Regional Water Program - Water in the Columbia Basin: Sharing a Limited Resource, November 2011. Presenter - How and Why the Walla Walla Basin is Promoting Water Efficiency in the Summer and Promoting Diversion in the Winter and Spring—Recovering a Lost Flood Plain Function in a Distributary River System.
- Northwest Environmental Business Council – Water Solutions Conference, June 2011. Water Solutions, Innovations in Water Management - Panel Presenter.
- Oregon Watershed Enhancement Board (OWEB) – Bi-annual Conference, November 2010. Clean Water Track – Panel Presenter.

PROFESSIONAL AFFILIATIONS

- National Ground Water Association, Association of Ground Water Scientists and Engineers.

PROFESSIONAL REGISTRATION

- Commonwealth of Pennsylvania Registered Professional Geologist, No. PG-4011