MEISER & EARL, INC.
2730 CAROLEAN INDUSTRIAL DRIVE
SUITE 100
STATE COLLEGE, PA 16801

Matthew L. Bell, G.I.T.

EDUCATION

M.S. West Virginia University. 2020. Geochemistry/Hydrogeology.

M.S. Thesis Title: Relating recharge mechanisms to chemical changes in an updip Appalachian coal mine discharge: A case study from Lambert Run, West Virginia

B.S. Lock Haven University. 2017. Geology.

Senior Thesis Title: Water Quality Index Assessment of the Headwater System Feeding the Lock Haven Public Drinking Water Supply

Relevant Courses:

Hydrogeology, Groundwater Modeling, Aqueous Geochemistry, Soil Chemistry, Organic Contaminant Geochemistry, Environmental Isotopes, Advanced Geographic Information Systems (GIS), Geomorphology, Structural Geology, Sedimentology, Stratigraphy, Geophysics & Tectonics, Environmental Geology, Principles of Biology

Certification:

- 40-Hour Training for Hazardous Waste Operations & Emergency Response (HAZWOPER)
- Hazardous Waste Site Worker Refresher Training (8 hours annually) in accordance with 29CFR 1910.120(e)(8), State College, PA.
- American Safety and Health Institute Approved Basic First Aid and Adult CPR Certification, plus annual re-certification.

EXPERIENCE

August 2020 - Present: *Staff Geoscientist | Meiser & Earl, Inc.| State College, PA*

- Duties include: groundwater/surface water sampling, soil/rock sampling, evaluating laboratory analyses, collecting and analyzing data logger information, stream gauging, assisting borehole video collection, preparing and reviewing data, conducting aquifer tests, well installation, and site reconnaissance/mapping.
- Supervisor: Jay Lynch, PG

May 2019 - July 2020: *Research Assistant | WV GIS Technical Center | Morgantown, WV*

- Responsible for landslide identification and quality control using high-quality LiDAR data and ArcGIS platforms.
- Aided in the preparation of outreach materials to inform the public of dangers and signs of slope failure throughout West Virginia.
- Performed field work mapping landslide locations, modes of failure, and mitigating factors, as well as field quality control of remotely mapped failures.

January - July 2018: *Staff Geologist | GEI Consultants, Inc. | Exton, PA*

- Supported data collection, visualization, and interpretation for a variety of environmental projects throughout Pennsylvania and New Jersey.
- Utilized software including ArcGIS, Surfer, gINT and AQTESOLV.
- Proficient in field sampling procedures, including low-flow purge and sample, low volume purge and sample utilizing peristaltic pumps, direct push sampling and logging, and monitoring well installation using hollow stem auger and air rotary drill rigs.
- Worked in accordance with CERCLA, SARA, RCRA, and TSCA regulations.
- Supervisor: Joe Perse, PG

May - August 2017: *Technical Intern | Arcadis, US | Cranbury, NJ*

- Experience reviewing phase I & II assessments, No Further Action reports, and correspondence with regulatory agencies.
- Low flow groundwater sampling for VOCs, SVOCs, PAHs and metals.
- Direct push drill soil coring and core description, including technologically enhanced naturally occurring radioactive materials (TENORM) waste sites.
- Sonic drilling operations and injection well installation.
- Staffing in-situ chemical oxidation operations.
- Geologic cross section drafting, groundwater flow mapping, and plume mapping.
- Supervisor: Marc Conger

Skills:

- Geologic map interpretation
- Groundwater/surface water sampling for a variety of organic and inorganic constituents
- Gauging of groundwater wells and piezometers
- Application of data loggers/hand water quality meters and associated software programs (Aquatroll, Leveltroll, Onset)
- Operation of peristaltic, bladder, and impeller pumps for groundwater sampling and well development
- Stream gauging
- Data review and manipulation
- Operation of weirs and flumes for discharge measurements
- Logging of drilling materials during site investigations and well installation
- Evaluation and review of laboratory analyses
- Aquifer test execution and data interpretation
- Proficient in basic Windows applications including Word, Excel, and Access

PROFESSIONAL REGISTRATION

Commonwealth of Pennsylvania Registered Geologist in Training, No. GT000348

PUBLICATIONS

- Maxwell, A.E.; Sharma, M.; Kite, J.S.; Donaldson, K.A.; Thompson, J.A.; **Bell, M.L.**; Maynard, S.M., 2020, Slope Failure Prediction Using Random Forest Machine Learning and LiDAR in an Eroded Folded Mountain Belt. Remote Sens. 12, 486. https://www.mdpi.com/2072-4292/12/3/486

SELECT PRESENTATIONS AND ABSTRACTS

- **Bell, M.L.**, Riddell, J.L., and Vesper, D.J., 2019, YREE quantities, enrichment, and distribution in karst springs and coal mine discharges. Geological Society of America Abstracts with Programs. Vol. 51, No. 5, doi: 10.1130/abs/2019AM-339386. https://gsa.confex.com/gsa/2019AM/webprogram/Paper339386.html.

- Lachhab, A., Khalequzzaman, Md, **Bell, M.**, Wolf, S., and Sharer, M., 2018, Applications of GPR, geospatial and geochemical techniques to determine sediment origin and accumulation patterns in Keller Reservoir, Clinton County, PA. Geological Society of America Abstracts with Programs. Vol. 50, No. 2, doi: 10.1130/abs/2018NE-310402. https://gsa.confex.com/gsa/2018NE/webprogram/Paper310402.html.

- **Bell, M.**, and Khalequzzaman, M., 2017, Water quality index assessment of the headwater system feeding the Lock Haven public drinking water supply: Geological Society of America Abstracts with Programs, v. 49, No. 2, doi: 10.1130/abs/2017NE-289742. https://gsa.confex.com/gsa/2017NE/meetingapp.cgi/Paper/289742.

- **Bell, M.**, Nash, R.T., and Khalequzzaman, M., 2017, Characterizing sources of turbidity in stream sediments in the Marcellus Shale gas-well drilling region in central Pennsylvania: Geological Society of America Abstracts with Programs, v. 49, No. 2, doi: 10.1130/abs/2017NE-289743. https://gsa.confex.com/gsa/2017NE/meetingapp.cgi/Paper/289743.