

EDUCATION

Ph.D. The Pennsylvania State University. 1975. Geology

M.S. The Pennsylvania State University. 1971. Geology

B.A. Franklin and Marshall College. 1969. Geology

Ph.D. Dissertation: "Ground-Water Geology and a Digital Simulation of Sustained Yield Potential of the Altoona Area, Pennsylvania". A study of an 85-square mile area, centered about Altoona, Pennsylvania, aimed at defining the hydrogeologic framework, evaluating the factors influencing well yields, and estimating the quantity of ground water which could be produced on a sustained yield basis. The investigation included reconnaissance geologic mapping of hydrogeologic units, preparing a regional water-table map, measuring specific capacity in 63 short-term pumping tests on domestic wells, and constructing a mathematical model simulation of the regional aquifer which employed the finite difference method and digital computer solution.

Master's Thesis: "Geology and Water Resources of the Bellefonte-Mingoville Area, Pennsylvania". Field-based research which comprised detailed mapping of the bedrock geology and reconnaissance investigation of ground-water resources in a 50-square mile area of the Nittany Valley in Centre County, Pennsylvania. The geologic study covers stratigraphic descriptions, soil types, economic geology and bedrock structure; the ground-water investigation includes occurrence and movement of ground water, water-table mapping, ground-water use and identification of contamination hazards.

Continuing Education:

- "Modeling Pollutant Movement in Groundwater," University of Wisconsin - Extension, Department of Engineering and Applied Science, June 8 - 12, 1981.
- "Ground-Water Modeling without Advanced Mathematics" by Thomas A. Prickett & Associates. January 14-17, 1985.
- "Ground-Water Modeling without Advanced Mathematics II" by Thomas A. Prickett & Associates. April 30-May 1, 1987.

Certification:

- Hygiene, Safety and Training, Inc. "Hazardous Waste Site Worker Protection Training Course" (40 hours). April, 1988. State College, 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.

EXPERIENCE

April 2001 to present: *Principal Hydrogeologist, Meiser & Earl, Inc., State College, Pennsylvania.* Same as below.

October 1985 to April 2001: *Secretary-Treasurer, Meiser & Earl, Inc., State College, Pennsylvania.* Completed projects including:

- developing municipal, industrial and domestic water-supply wells;
- evaluating regional ground-water resources;
- studying site suitability for municipal, industrial and hazardous solid waste disposal;
- assessing impacts of surface mining coal on hydrogeologic systems and evaluating mine-drainage contamination problems;
- defining ground-water flow systems for industrial contamination sites;
- investigating subsurface fuel-storage leakage;
- analyzing geologic and hydrologic conditions for coal mining and quarry permits;
- testifying as an expert witness in Federal and State court trials and State review board hearings; and
- serving as technical consultant to Maryland DNR Bureau of Mines for review of coal permits and evaluating hydrologic consequences of mining.

March 1976 to October 1985: *Partner, Meiser & Earl / hydrogeologists, State College, Pennsylvania.*

December 1973 to February 1976: *Project Hydrogeologist, Todd Giddings and Associates, State College, Pennsylvania.* As project manager, held responsibility for preparing proposals; coordinating and supervising work, and producing reports. Project responsibility included: water-supply well development; solid waste disposal site studies; ground-water contamination investigations; mine dewatering plans (limestone, coal, and phosphate mining); soil suitability analyses for spray irrigation disposal of domestic and industrial wastes; bedrock foundation suitability evaluation; industrial mineral evaluations (shale, limestone), expert witness testimony (Federal and Pennsylvania State trials and hearings).

July 1973 to June 1974: *Cooperating Hydrogeologist with Pennsylvania Geological Survey*; awarded contract for preparation of report for publication on ground-water resources in area of Altoona, Pennsylvania.

Spring to Fall, 1972, 1973: Field research in Altoona, Pennsylvania area for Ph.D. dissertation.

Summer to Fall, 1970: Field research in Bellefonte, Pennsylvania area (Centre County) for Master's Thesis.

Summers 1968, 1969: *Technician with D.M. Stoltzfus and Son, Inc., Talmagde, Pennsylvania.* Responsible for specifications testing of crushed stone aggregate production at seven quarry operations in Pennsylvania, Maryland and Delaware.

Summer, 1967: *Undergraduate research assistant, National Science Foundation U.R.P. Grant, Franklin and Marshall College*, structural geology topic with advisor, Dr. D.U. Wise.

1969 to 1972: *Graduate teaching assistant at The Pennsylvania State University* for laboratory sections of physical geology, historical geology and geology for engineers (10 terms).

PROFESSIONAL AFFILIATIONS

- National Ground Water Association, Association of Ground Water Scientists and Engineers, Active Member
- Advisory Council to Penn State's PELLRAD Program (Public Education on Low Level Radiation)

PUBLICATIONS

Meiser, E.W., Jr., T.A. Earl and R.M. Bodner. 1980. Leachate collection using the ground-water flow system - a landfill case history in central Pennsylvania. Proceedings of third annual Madison conference of applied research and practice on municipal and industrial waste. Madison, Wisconsin, September 10-12, 1980. pp. 214-227.

Meiser, E.W., Jr. and T.A. Earl. 1982. Use of fracture traces in water well location: a handbook.

U.S. Dept. of the Interior OWRT TT/82 1. 55p.

Earl, T.A. and E.W. Meiser, Jr. 1984. Use of fracture traces in water well location. Proceedings of international conference on ground-water technology. Johannesburg, South Africa. NWWA/Borehole Water Association of South Africa. Nov. 14-17, 1984. pp.341-364.

Hershey, R.M., N.W. Hedrick and E.W. Meiser, Jr. 1984. Backfilling techniques and alkaline addition to control acid mine drainage in a coal strip mine. Proceedings of seventh national ground-water quality symposium. Las Vegas, Nevada. National Ground Water Association. September 26-28, 1984.

PROFESSIONAL REGISTRATION

Commonwealth of Pennsylvania Registered Professional Geologists, No. PG-1289-G

Virginia Board of Geology No. 000554

Wyoming Board of Registration for Professional Geologists, No. PG-1668