



Michigan Geological Repository for Research and Education (MGRRE) at the Michigan Geological Survey Fact Sheet



About MGRRE

- Laboratory founded by Dr. William Harrison in 1982 as the Michigan Basin Core Research Laboratory
- Located at 5272 West Michigan Avenue, with easy access to US Hwy. 131 and I-94
- Total area—28,500 square feet—with 22,000 square feet for sample preservation and examination and 6,500 square feet for offices, research labs, student work space and library

MGRRE Sample, Data, and Laboratory Resources

- More than 600,000 linear feet of core samples from Michigan's subsurface geological formations
- Drill cuttings samples from over 25,000 Michigan wells
- Wireline logs from over 35,000 Michigan wells
- Well records, sample data, engineering analyses, and analytical data from nearly 50,000 Michigan wells
- Oil and gas well production records and historic maps from Michigan's nearly 2,000 fields
- Thousands of samples, high-resolution photographs, and well records freely accessible in digital form at [ScholarWorks](#) and [SketchFab](#)
- Permeability testing equipment
- High resolution, digital photo microscopes for sample analyses
- Fluid inclusion and cathode luminescence microscopes for sample analyses
- Handheld X-ray Fluorescence (XRF) elemental analysis tool

Training and Outreach (Professional and K-12)

- Sample examination area for more than 1,000 feet of core
- 35-seat education room for seminars, workshops, short courses, and lectures
- Active Web site with digital data resources and "industry standard" software for data analysis
- Dozens of workshops, lectures, seminars and short courses presented
- CoreKids K-12 Outreach program reaches 1,000's of students, teachers and the public per year

Personnel at MGRRE

- Director, Dr. Autumn Haagsma who is also Assistant Director of the Michigan Geological Survey
- Research Director, Dr. William B. Harrison, III
- Geoscience Department faculty – Dr. Stephen Kaczmarek, Dr. Peter Voice, and Dr. Mine Dogan
- Researchers –Amber Conner and Jennifer Trout
- Administrator –Linda K. Harrison; Geotechnician: Ricky Haagsma
- Undergraduate student employees and grant-funded research assistants

Research Activities at MGRRE

- Characterizing reservoir and seal formations to facilitate carbon capture, utilization and storage (CCUS) in Michigan, 2005-2026, funded by US Dept. of Energy.
- Rescuing and archiving Michigan core, samples and data and making them available digitally at [ScholarWorks](#), 2008-2026, and scanning outcrop, fossil and core samples to create 3-D models using [Sketchfab](#), 2024-2027, funded by US Geological Survey's National Geological and Geophysical Data Preservation Program.
- Assessing historic, current and potential availability of Michigan minerals designated as Critical Resources, 2019-2024, funded by US Geological Survey.
- Analyzing and compiling Michigan geothermal data project, 2010-2013, funded by Partnership with Arizona Geological Survey.
- Creating integrated regional reservoir characterization model of the Ordovician Trenton and Black River units in Michigan, 2009-2012, in partnership with RPSEA, US Dept. of Energy.



Michigan Geological Survey
Michigan Geological Repository for Research and Education
Department of Geological and Environmental Sciences
Western Michigan University
5272 W. Michigan Avenue, Kalamazoo, MI 49008-5241
Phone: (269) 387-8633 Web sites: <https://wmich.edu/geologysurvey> and
<http://wmich.edu/michigangeologicalrepository>

Rev. 07_11_24