

Michigan Geological Repository for Research and Education (MGRRE)

Summary of Key Achievements 2006 to 2018

MGRRE (formerly the Michigan Basin Core Research Laboratory) was formed in 2006 when the facility was moved from West Hall to 5272 West Michigan Avenue. The Michigan Basin Core Research Laboratory was created in 1982 by Dr. William B. Harrison, III. Since 1982, the organization has archived samples and data that are used Michigan Basin geological research and student education.

Key accomplishments of the MGRRE organization from 2006 to 2018 are:

- 37 peer-reviewed publications by MGRRE faculty and students, 13 of which were included the Geological Society of American Special Publication 531, published in April, 2018
- 94 published abstracts from conference presentations
- 22 Industry-outreach workshops organized for the Petroleum Technology Transfer Council
- \$5,935,264 in external funding
- \$ 930,312 initial donations to MGRRE endowments
- \$ 465,500 donations to CoreKids K-12 Outreach Program
- \$1,300,500 MGRRE workshop and user fees, additional annual donations to endowments and endowment income
- 34 Masters students completed theses and graduated, 2 additional students changed to the non-thesis Master's degree option and graduated.
- Archived and inventoried numerous large collections of geological cores and samples to a total of 550,000 linear feet of cores and over 25,000 sets of drill cuttings from individual wells. Drill cuttings represent more than 30 million feet of drilled strata throughout Michigan.
- Archived and scanned thousands of reports of core analysis testing listing quantitative data on porosity and permeability that has been entered into MS-Excel spreadsheets for digital access and uploaded to a national data archive.
- Built a digital relational database using industry standard software PETRA (IHS Systems) for over 77,000 wells in the Michigan basin. Dataset contains all well header information, location in Lat./Long. Scanned and digitized well logs, scanned driller's reports have been converted to OCR for keyword searchability.
- Archived and indexed extensive paper map collections donated by numerous industry members.
- Archived and inventoried several collections of rock samples collected from outcrops and quarries throughout Michigan. Part of the collection is an historical set of samples collected by the Michigan Geological Survey in the middle 20th Century.
- Curated a large collection of Michigan Geological Survey historical publications and are periodically distributing them to professional geology groups, teacher education groups and the general public.
- Curated and began scanning hundreds of open file reports, working files and miscellaneous documents inherited from the DEQ Office of Oil, Gas and Minerals. This includes significant amounts of unpublished information.
- Cores, cuttings and data were used by MDOT, industry, and researchers for resource exploration and development, construction and mapping projects, supporting economic development and providing societal benefits.