

MICHIGAN: A GEOGRAPHY
Ch. 10 Hydrocarbon Resources of the Michigan Basin
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History of Oil and Gas Exploration

- The nineteenth century
- Role of brine wells
- Saginaw field
- The central basin
- Trenton/Black River and Albion-Scipio field
- Niagaran reefs
- Drilling deep
- Antrim shale gas

Oil and Gas Reservoir Types, Traps and Seals

- Carbonate reservoirs
 - Limestone
 - Dolomite
- Clastic reservoirs
 - Sandstone
 - Shale

Production History Characteristics

- Cumulative Michigan oil and gas production
- Individual producing formations production history
- Abandoning wells and fields, economic production limits

Estimating future production potential

- Enhanced recovery processes
- New production areas and formations

Uses of crude oil and natural gas

- Crude oil
 - Energy products
 - Petrochemicals
- Natural gas
 - Direct energy
 - Source of hydrogen
 - Chemical feed stock

Potential types of figures

- Historic photographs
- Map of Michigan oil and gas wells
- Stratigraphic column/geologic time scale with producing formations highlighted
- Cumulative oil and gas production chart through time
- Core photographs of rock samples from producing formations
- Generalized drawings of types of oil and gas field reservoirs, traps and seals