

On the Rocks



A Newsletter of the Michigan Basin Geological Society

E-mail version

2001-2002 Number 2

www.mbgs.org

September, 2001

Events

September 23-25, 2001: Eastern Section Meeting, Fetzer Center – Western Michigan University, Kalamazoo, Michigan, sponsored by the Michigan Basin Geological Society. For information contact: <http://141.218.61.117/esaapg2001>.

September 27, 2001: AIPG Michigan Section Meeting. Speaker Mike Piddington, Prosonic Drilling will provide an update regarding advancements in Rotosonic Drilling Ann Arbor, Michigan. Location: Mountain Jack's, 5800 West Saginaw Lansing, Michigan. Cost: Students \$20.00, Members \$30.00, Non-members \$35.00. Cash Bar 5:30-6:00, Dinner 6:00, Presentation 7:00. Call Linda Van Buren (810) 225-6271 with reservations.

September 30-October 2, 2001: Mid-Continent AAPG annual Section meeting, Amarillo, Texas.

October 7-13, 2001: Earth Science Week

October 10, 2001: Joint MBGS-SPE Meeting The speaker is Don Towson of D.E. Towson and Associates Inc. and his presentation is: “How Technology Has Unlocked A 160 Billion Cubic Metre Resource: The Oil Sands Of Alberta, Canada.”

November 14-16, 2001: 40th annual Ontario Petroleum Institute Conference and Trade Show, London Hilton Hotel, London, Ontario, Canada. For more information contact: www.ontpet.com or opi@odyssey.on.ca.

December 6, 2001: AIPG Michigan Section Meeting. Bill Siok, AIPG Executive Director, AIPG annual awards banquet and discussion regarding national affairs. Location to be determined.

The Eastern Section Meeting from September 23-25, 2001 will supercede the September MBGS meeting.

The Website for the Eastern Section AAPG Meeting is online and available for people to browse and get the registration information. The program is set with about 45 oral presentations and 8-10 posters. There will be a full 2 days of technical sessions with two concurrent sessions both days. There are 2 field trips and three workshop/short courses.

You can check the program on the website at
http://141.218.61.117/esaapg2001/esaapg_index.htm

EAAPG Participants

Stop by the Michigan Basin Geological Society booth for a complimentary copy of either:

1) Special Paper #1: Middle Devonian Stratigraphy and Depositional Environments in the Michigan Basin, 1974, W.C. Gardner, 144 pp., illus., maps.

OR

2) Special Paper #2: The Bell River Mills Gas Field; Productive Niagaran Reefs Encased by Sabhka Deposits, 1977, D. Gill, 118 pp., illus.

Dues

Dues for membership in the MBGS are \$25.00. The dues are payable by September 2001 for the 2001-2002 season. *Remember to check your address Label on the Newsletter. If it reads (9-2001) on the last line then you will need to send in dues for the 2001-2002 season. Otherwise E-mail the Newsletter Editor or the Treasurer for your status. Unless otherwise noted all members who receive the Newsletter by e-mail must pay dues for the 2001-2002 season.*

Field Trip Director

The MBGS is looking for a person to take over as Field Trip Director. Tim Cowen held this position for many years and has done a great job. This is an opportunity to set up trips to areas that you may have wanted to visit. The Society is also open to nominations for this position. The MBGS can only continue to exist if its members are willing to contribute some of their time to keep it going so I urge you to seriously consider the job.

MBGS Mug, Denim Shirt and Jacket Sale`

The Michigan Basin Geological Society is offering mugs, denim shirts, and jackets with the society logo for sale. The mugs are \$5.00 each. The jackets are \$60.00 each plus postage. Please contact Dan McGuire at: Phone (517) 772-5219, Fax (517) 772-7021, or danmcguire@sensible-net.com. Remember to include the correct size of the shirt or jacket and the quantity of each item. Checks should be made out to the MBGS.

MEETING CANCELLATION POLICY

Monthly meetings will be automatically cancelled whenever the National Weather Service issues a "Storm Warning" for the Lansing area. If driving conditions are poor but a "Warning" has not been issued please contact any member of the Executive Committee for the status of the meeting.

Biography

Don Towson received a B.A. Sc. in chemical engineering from the University of British Columbia in 1961 and a Ph.D. in chemical engineering from the University of Birmingham, England in 1964. Don joined Imperial Oil Limited Production Research Department in Calgary working as a research engineer and supervisor on thermal recovery processes, and was involved in conventional reservoir engineering and in-situ, bitumen recovery pilot projects. In 1977, Don joined Petro-Canada holding engineering management positions relating to heavy oil and oil sands development and was appointed Senior Technical Advisor, Thermal Recovery in the Technology Improvement Department, in 1989. In 1992, he joined PHH Petroleum Consultants as an Executive Consultant. In 1994 Don established an independent heavy oil and oil sands consulting practice. Don is a Past President and Director of the Canadian Heavy Oil Association. He is a Fellow of the Canadian Institute of Mining, Metallurgy and Petroleum, a past Society Chairman and Distinguished Lecturer for the Petroleum Society and a member of SPE and APEGGA.

“How Technology Has Unlocked A 160 Billion Cubic Metre Resource: The Oil Sands Of Alberta, Canada.”

The Oil Sands deposits in Alberta, Canada are a vast resource containing an estimated 160 billion cubic metres of oil-in-place. The resource consists of a number of deposits of uncemented sand, bitumen, water and clay. Approximately ten percent of the resource is accessed with open pit mining methods while the remainder requires some form of insitu recovery. Recovery has been inhibited by the 1 million cp viscosity of most of the bitumen.

Commercial development of the oil sands was a long, slow process. Exploration took place in about 1885, with laboratory experimentation beginning about 1913 to find a means of separating the bitumen from the sands. The first pilot plant was not constructed until 1930 and commercialized in 1967 by the Great Canadian Oil Sands (now Suncor) plant. Imperial Oil began experimentation on in-situ recovery processes in 1964, and first commercialized an in-situ operation in 1985. The pace increased dramatically in the last 15 years. A second mining and second in-situ operation was started, and five more have been approved. Operating costs for the mining projects were cut in half, operating cost were also reduced for the in-situ operation and recovery levels were increased from 12 percent to 25 percent or more.

This dramatic development pace, the increase in recovery and the decrease in operating cost can all be attributed to technological advances. These include increased equipment capacity, slurry pipelining, deviated wells, horizontal wells, CSS (Cyclic Steam Stimulation), SAGD (Steam Assisted Gravity Drainage), 3D seismic, improved reservoir simulation and reservoir geomechanics. Upcoming technologies include VAPEX (a solvent-based non-thermal recovery process) and improved monitoring processes. This presentation will look at the role played by technology in the commercial development of the Oil Sands and give a brief look at some coming technologies.

MBGS-SPE Meeting

October 10, 2001

Location: Holiday Inn (South)
6820 S. Cedar St., Lansing, MI.

Schedule: 5:30 to 6:30 PM Social Hour
6:30 PM Dinner
Presentation after dinner

Cost \$25.00/member \$10.00 Student (includes dinner)

Topic: "How Technology Has Unlocked A 160 Billion Cubic Metre Resource:
The Oil Sands Of Alberta, Canada."
By Mr. Don Towson

MBGS Dinner Meeting Reservation

Name _____

Number attending _____ Society _____

Enclosed Registration Fee _____

Please make your check out to the SPE and return to Steve Nowaczewski by October 6, 2000

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Michigan State University Alumni/Geology Club Distinguished Lecture Series

Fall Semester, 2001

October 4, Tuesday: Dr. Ken Anderson “The Chemistry of Amber-Science at the Intersection of Myth and Mystery”

October 18, Thursday: Dr. Tom Lowell “The Great Lakes Lobes of the Laurentide Ice Sheet and Alpine Glaciers in the Southern Hemisphere-Who’s on First?”

October 31, Wednesday: Dr. Roger Slatt (AAPG) “Outcrop/Behind Outcrop Characterization of Deepwater (Turbidite) Petroleum Reservoir Analogs: Why and How?”

November 15, Thursday: Dr. W. Berry Lyons “Sediment Fluxes from High Standing Islands: Their Importance to Oceanic Geochemical Budgets.”

November 29, Thursday: Dr. Benjamin Edwards “Glacial Pumping of Magma-Charged Lithosphere: The Formation of Hoodoo Mountain Volcano, Northwestern British Columbia, Canada”

December 6, Thursday: Dr. Michael Engel: “The Earliest Record of Organic Synthesis in the Solar System: Implications for the Origin of Life”

Central Michigan University Fall Speaker Schedule

Friday September 21, 2001, 11:00 am, BR 305, Ed Hansen, Hope College, “The Geomorphic History of the Coastal Dune Complex of Southeastern Lake Michigan”

Friday October 12, 2001, Kris Huysken, Indiana University, Eric Wallace, Waste Management: “Careers in Geoscience”