

On the Rocks



A Newsletter of the Michigan Basin Geological Society

2005-2006 Number 2

www.mbgs.org

October 2005

EVENTS

October 12, 2005: MBGS **MENTORS MEETING**. MBGS encourages its members to invite a geologist who served as a mentor to them or who helped mentor the geologic community in Michigan. To help honor our mentor guests, they will receive dinner at no charge. **Ken Petrie** will discuss “**Winds of Change in Saudi Arabia.**” See abstract and biography below.

October 20, 2005: PTTC presents **Undiscovered Oil in the Michigan Basin, Part II**. See additional information below.

October 21-23, 2005: Central Michigan Lapidary & Mineral Society, presents their annual "Gem, Mineral, Fossil, Lapidary & Jewelry Show", at the Ingham County Fairgrounds, Mason, MI. Visit their website and additional information about the show at <http://www.michrocks.org/annualshow/annualshow.htm>.

November 2, 2005: The Society of Petroleum Engineers sponsors this month's MBGS meeting with **Iskander Diyashev** looking at **The Oil Industry in Russia**.

YES, IT'S STILL DUES TIME

Not many members have taken the time to renew their MBGS dues for the 2006 season, please take the time to return the information ON PAGE FOUR with your dues. **Your newsletter editor encourages distribution by e-mail** as a more timely and cost efficient way to receive your newsletter. Timely renewal helps your officers plan for the upcoming year and is the best way to ensure there will be no interruptions in receiving your On the Rocks newsletter.

2004-2005 MBGS Officers

The Executive Committee meeting minutes are available on the website.

PRESIDENT: DR. ROBB GILLESPIE,
WMU Geology Department
Ph: 269-387-5354, fax 269-387-5513
robb.gillespie@comcast.net or
robb.gillespie@wmich.edu

VICE PRESIDENT: ROBERT REYNOLDS,
Reynolds Geological, LLC
Ph: 517-676-9936, fax 517-676-8169
reynoldsgeo@voyager.net

SECRETARY: DAVID BAXTER,
Petrodata Resources
Ph: 517-669-5409
PetroDataRes@comcast.net

TREASURER & PUBLICATIONS: TOM HOANE,
FMFM, DNR
Ph: Bus 517-241-3769, fax 517-373-2443
hoanet@michigan.gov

BUSINESS MANAGER: LEONARD ESPINOSA
FMFM, DNR
Ph: 517-335-3248, Fax 517-373-2443
espinosl@michigan.gov

PAST-PRESIDENT: DR. MICHAEL GRAMMER,
WMU Geology Department
Ph: 269-387-3667, fax 269-387-5513
michael.grammer@wmich.edu

CO-FIELDTRIP DIRECTORS:
MARK WOLLENSAK, CPG
HAMP, MATHEWS & ASSOC, Inc.
Ph: 517-641-7333 Fax 517-641-7337
Cell 517-719-8321
wollensak@voyager.net

LEONARD ESPINOSA, FMFM, DNR
Ph: 517-335-3248, Fax 517-373-2443
espinosl@michigan.gov

NEWSLETTER EDITOR: TOM WELLMAN,
FMFM, DNR
Ph: 517-373-7666, Fax 517-373-2443
wellmant@michigan.gov

ELECTRONIC PUBLICATIONS, MARK WOLLENSAK
(see above)

WEBMASTER: GREG VARNUM
me@gregvarnum.com

University Talks and Seminars Websites

Western Michigan University:
www.wmich.edu/geology/SeminarGeos.html

Michigan State University:
www.glg.msu.edu/news/lectures.html

University of Michigan, Turner Lecture Series:
www.geo.lsa.umich.edu/announce/turner02b.html

Michigan AIPG Section website: www.aipg-mi.org.

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.

MICHIGAN BASIN GEOLOGICAL SOCIETY PUBLICATIONS

Historical CD #1: Nine out-of-print publications from 1949 through 1965 and 1998, Devonian to Silurian Rock Fieldtrips to MI, WI, IL and Ontario, 2000, \$15

Historical CD #2: Four out-of-print publications from 1947, 1959, 1983 and 1991, Northern Devonian and UP Fieldtrips in MI, 2001, \$10

Historical CD #3: Six out-of-print publications from 1947, 1959, 1983 and 1991, Northern Devonian and UP Fieldtrips in MI, 2001, \$12

Special Price - Historical CD #1, #2 & #3, \$30

Stratigraphic Lexicon for Michigan, 2001, prepared by MBGS and published by DEQ, 56 pp., chart, \$2.65 picked up or \$4 mailed, Can be ordered from MBGS or Geological Survey Div. of the DEQ

Price Includes postage, handling and any applicable sales tax. MBGS Members receive a 10% discount on MBGS publications. Orders for publications should be prepaid in U.S. Funds and addressed to:

MBGS - Publications
c/o Dept. of Geological Sciences
206 Natural Sciences Building
Michigan State University
East Lansing, Michigan 48824-1115

MBGS Mug and Jacket Sale

The Michigan Basin Geological Society is offering mugs 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 jacket and the quantity of each item. Checks should be made out to the MBGS.

MBGS Mentors Meeting

October 12, 2005 (WEDNESDAY)

Coyote Creek
6951 Lansing Rd, Dimondale, MI.

Schedule: 5:30 to 6:15 PM Social Hour
6:15 PM Dinner
Presentation after dinner

Cost \$25.00/member \$15.00 Student (includes dinner)
Mentor Guests Eat Free!!

Topic: **“Winds of Change in Saudi Arabia”**

By
Ken Petrie

MBGS Dinner Meeting Reservation

Name _____

Number attending _____ Society _____

Enclosed Registration Fee _____

Please make checks payable to **MBGS** and return to Leonard Espinosa by **October 10, 2005**
Members are welcome to attend the presentation after dinner for no charge. Please contact
Leonard Espinosa to ensure adequate seating. Send reservations to:

Leonard Espinosa
P.O. Box 18074
Lansing, MI 48901-8074
Ph: Bus Ph: 517-335-3248, Fax 517-373-2443
E-mail: espinosl@michigan.gov

Winds of Change in Saudi Arabia

By Ken Petrie

Saudi Arabia has long been an important supplier of oil to the world and its policies have a major impact on crude prices. Since September 11, 2001, the reliability of Saudi Arabia has been questioned due to links to terrorism, stability of the Royal Family, and even scrutiny of oil reserves. This presentation will examine the forces behind events in the Kingdom and what change might mean for world oil prices and supplies.

Biography

Ken has nearly 25 years of worldwide exploration and production experience in the oil and gas industry, including employment with Saudi Aramco from 2000 to 2004. His assignments in Saudi Arabia included working with the Reserves Assessment Division and on the Natural Gas Initiative; which opened the country to foreign investment in non-associated gas. Ken returned to Michigan after a 26 year hiatus from forests and natural lakes, and joined Aurora Energy, Ltd. earlier this year.

Michigan Basin Geological Society Dues Notice

Please fill out this form when paying your dues for 2005-2006. Dues are \$25.00 for active member and \$10.00 for students.

Name_____

Address_____

Phone_____

E-Mail_____

Amount enclosed_____

Send Newsletter by e-mail_____ or Mail_____ @ address above

Make check payable to: MBGS

Send to: Tom Hoane
1748 Danby Lane SE
Grand Rapids, MI 49506

Our Secretary, **Dave Baxter** submitted the following:
Hello folks,

The enclosed images show a pair of mineralized vugs in Bayport Formation limestone from the Wallace Stone Quarry, the type locality of this unit. Most of the details are contained in the TXT-file captions, but I would like you to consider the possibility the dark colored carbonate crystals have hydrocarbons inclusions.

I have also collected similar Bayport limestone samples from the opposite side of Saginaw Bay, at the former Arenac County Road Comm Quarry, now used as a golf course. This location shows evidence of significant faulting with little apparent off-set, which correlates with the obvious antiformal structure known from the petroleum fields of Ogemaw County. The faulted and fractured rocks are covered with veins, en-echelon stringers, and vugs filled with amber-colored carbonate crystals (see my 2004 PPT-presentation on the MBGS Gaylord field conference CD-ROM).

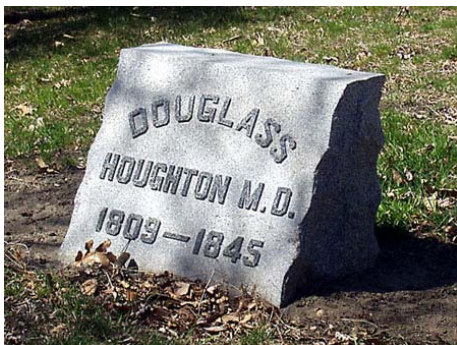


Then there's the Bayport limestone in Bellevue, Michigan, which has a wide variety of breccia zones and secondary mineralization (Al Blaske has published several papers on this topic). I've also found fractured and mineralized Bayport at a >100-year-old quarry site near Spring Arbor, again looking similar to the Arenac quarry rocks.

So whatever happened to fracture this formation, it seems to have impacted a wide region of the Michigan Basin, except for the Wallace Stone Quarry, where no obvious faulting or fracturing has been reported. But all sites show evidence of one, two, or more episodes of post-Bayport hydrothermal mineralization.



Also, if anyone has the facilities to make thin sections and/or would like to conduct other types of analysis I would be glad to provide samples. I'd also like to know what your thoughts are regarding the possibility of hydrocarbon inclusions in the carbonate crystals. Thanks.....Dave Baxter



Also, our Business Manager, **Leonard Espinosa** took the following picture of Douglas Houghton's gravesite while attending the recent salt mine tour. More photos and a synopsis of the field trip in next month's newsletter.



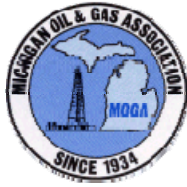
PETROLEUM TECHNOLOGY TRANSFER COUNCIL

Michigan PTTC Center

Michigan Basin Core Research Laboratory

Western Michigan University

and the



MICHIGAN OIL AND GAS ASSOCIATION

Jointly present a one-day workshop

Part II--Undiscovered Oil and Gas in the Michigan Basin

At the Holiday Inn, Mt. Pleasant, MI, on October 20, 2005, from 8:00am to 4:00pm

Geoscientists from the United States Geological Survey, Western Michigan University, and the University of Houston will address these questions:

- How much undiscovered oil and gas still exists in the Michigan Basin?
- Which formations offer the best prospects?
- What is the potential for EOR through CO₂ sequestration in the Michigan Basin?
- How can you use the "petroleum systems" concept to develop exploration models?
- Which facies are the best oil and gas producing zones?
- How can you use information from modern depositional environments and their ancient analogs in exploration?
- How might new seismic imaging techniques provide the tools for new discoveries in Michigan?

A panel of Michigan independents will share their thoughts on these concepts.

Cores will be available from modern and ancient carbonate environments and from producing source rocks.