



# American Institute of Professional Geologists Michigan Section

July 2011

## From the President's Desk

I am writing this having recently attended the successful Advanced Tools for In-Situ Remediation workshop co-sponsored by the AIPG-Michigan Section and the MDEQ, the details of which are included in a separate article. However, I would like to take this opportunity to thank Kevin Lund for his efforts in bringing this professional development opportunity to fruition. Kevin was instrumental in making this event successful from conception to execution, the funnel cloud in Roscommon and locked Dodge mini-van notwithstanding. The workshop not only provided an excellent chance to expand our knowledge of remedial concepts and methods, but also provided an opportunity to improve professional camaraderie. Our section and our profession are the better for it. Thanks Kevin.

This past March National AIPG requested that all sections complete a survey regarding issues faced at the section level and how National can provide support to make sections stronger. In short, many AIPG sections are inactive or appear to be languishing. The survey was part of an information gathering process intended to help a recently created ad-Hoc committee assess the health of the sections, identify problems and make recommendations for the national Executive Committee and the membership-at-large. The final report was circulated to Executive Committees at the end of June and should be online at the AIPG website by the time this newsletter has been published.

- The committees' report presents candid feedback from members and non-members about how AIPG is perceived. Among the conclusions were that membership numbers and membership activity are related to the value that the organization provides, which I suspect surprises no one. Recommendations made with respect to the AIPG sections include:
- providing professional development programs;
- field trips;

- cooperation with sister organizations, governmental agencies and academia;
- publicize sectional events through National AIPG before and after the event; and
- increase the "how to do it properly" content of the TPG and promote it as such.

The Michigan Section has a strong record of conducting many of the recommended activities. The results of which help make participation in the Michigan Section valuable and worthwhile. All of the Sections accomplishments happen for only one reason: dedicated professionals who are willing to put in some effort and help improve the profession. We need to be vigilant in seizing opportunities to provide value to our profession. Accordingly, if you have any ideas that you wish to share, please contact someone on the Executive Committee. Better yet, if you think you can occasionally spare a little time and can participate in a section activity or work on a committee, please jump in and contribute.

Don Conway, CPG – 2011 Michigan Section President

---

## Section Officers Reports

President: Information presented in the "From the President's Desk" article above.

Vice President: No report.

Treasurer: Details of the Section accounts are summarized in the Secretary's report.

Secretary: June 21, 2011 Executive Committee meeting minutes are as follows:

### I. Call to Order: 3:30 PM

Attendees: Jason Lagowski, Don Conway, Dawn Prell, Adam Heft, and John Barkach.

### II. Treasurer's Report

- John Barkach indicated that early conversations with Kevin Lund suggest that AIPG could net \$4,000 to \$6,000 from proceeds from the AIPG-

MDEQ joint-sponsored In-Situ Training Workshop that is to take place June 22-23 in Roscommon, MI. Possible uses for the money were discussed, including grants for science education uses.

- The general membership meeting in Grand Rapids in May was a break-even event because there were a significant number of guest speakers and students present, and they are not charged for attending AIPG meetings. Approximately 32-33 persons were in attendance for that meeting.
- The rollover of certificates of deposit (CDs) occurred in November 2010; the next one will be coming up in December 2011.
- We received a \$4,000 check from the AIPG Foundation to be used as we wish for educational purposes. The existing AIPG Foundation is being phased out and funds are being released to active sections. A new Foundation will be formed to better align with AIPG objectives.

III. September 2011 AIPG National Meeting. No additional information from last executive meeting. Dawn Prell still plans to attend as Michigan Section representative. The next newsletter will remind Section Members of the event and encourage participation.

IV. 2011 AIPG Section Meeting Schedules and Speakers. The following meetings are tentatively scheduled for the remainder of 2011:

- September 22nd, 2011, University Center, Mt. Pleasant, MI – Don has approached Richard Lassen with VMS Development as a potential speaker. Richard is knowledgeable in the area of mining in the Upper Peninsula. Eric Wallace may try to recruit the assistance of CMU student section to identify significant geologic contributes and identify a venue for the meeting.
- December 1st, 2011, Webbers' Inn, Ann Arbor, MI – no speaker has been confirmed. Don or Jason agreed to talk to Kevin Lund to see if any potential speakers who were not selected for the upcoming In-Situ Workshop might be interested in speaking to the AIPG membership at the December meeting.

V. Golf Outing Update. The 2011 AIPG Golf Outing took place on May 10, and was well attended. Approximately 72 golfers played at the event and a good time was had by all.

VI. Status of Student Chapters: Posters are available from AIPG-National for extolling the virtues of AIPG membership. We requested 10 posters and expect

to distribute them to several universities in September, after school is back in session.

VII. AIPG-National and Michigan Section Field Trips:

- August 12-13, 2011 - Michigan Section AIPG Annual Field Trip, Northeast Michigan Karst Features, Alpena Glass Bottom Boat Shipwreck Tour, and Rockport Quarry. Contact Sara Pearson to RSVP by July 25, 2011 if interested.
- September 16-18, 2011 - MBGS Field Trip to Marquette area, Michigan. MBGS will host a geologic field trip to Upper Peninsula of Michigan to look at Precambrian rocks that range in age from 3.2 Ga (or more) to 1.0 Ga years, and represent some of the oldest known rocks in the North American continent. The trip will be led by Dr. Robb Gillespie from Western Michigan University.

VIII. Newsletter: The next newsletter publication date is July 8, so articles for the newsletter are needed by July 1. Sarah Pearson and Mark Sweatman have stepped up to offer their services as assistant editors of the newsletter.

IX. Other: The next executive meeting is scheduled for September 22, 2011, immediately prior to the general Section meeting.

One of the education grant recipients (Kellogg School) attended the May meeting to demonstrate how our grant money was used to further education in the geosciences.

Declining membership has been observed in states that have implemented their own geological licensing programs – Recent National AIPG study has tied this to a low perceived value of AIPG membership where alternative and often times required certification programs exist. In Michigan, there is no licensing for geologists. This may be because the oil & gas industry has resisted licensing of geologists due to aversions to additional regulations on the industry. We need to find ways to counteract these perceptions, and find ways to espouse the value of AIPG involvement and remain relevant with our constituency.

X. Adjournment – 4:30 p.m.

---

## Coming Events

**August 12-13, 2011:** Michigan Section AIPG Annual Field Trip, Northeast Michigan Karst Features, Alpena Glass Bottom Boat Shipwreck Tour, and Rockport Quarry. Details included on flyer attached to this newsletter. Contact Sara Pearson to RSVP by July 25, 2011.

**September 10-13, 2011:** AIPG Annual Meeting, Hilton Chicago Indian Lakes Resort, Bloomingdale, Illinois.  
<http://www.aipg.org>.

**September 16-18, 2011:** MBGS Field Trip to Marquette area, Michigan. MBGS will host a geologic field trip to Upper Peninsula of Michigan to look at Precambrian rocks that range in age from 3.2 Ga (or more) to 1.0 Ga years, and represent some of the oldest known rocks in the North American continent. The trip will be led by Dr. Robb Gillespie from Western Michigan University with help from Mark Wollensak, Mark Nida, and others.

**September 22, 2011: AIPG Section Meeting:**  
“Development of a the “Back 40” Precious Metals Project in Lake Township, Menominee County, Michigan” by Richard Lassin, PG.

Location: University Center, Central Michigan University, Mt. Pleasant.

Dinner: Home-Style Buffet – includes chicken oscar, beef stir-fry, and cheese ravioli with tomato basil sauce, garden salad, roasted redskin potatoes, fresh green beans and apple pie.

Schedule: Cash Bar 5:30-6:30 PM, Dinner 6:30 PM, and Speaker 7:30-9:00 PM.

Cost: Students free, Members \$35.00, Non-members \$40.00.

**RSVP by September 19, 2011:** RSVP to Craig Savage at [csavage@gfnet.com](mailto:csavage@gfnet.com). Please remember to include your meal choice. Notice by e-mail is preferred, and please include AIPG in the subject line. Craig can also be reached at (734) 753-5880.

**October 9-12, 2011:** Geological Society of America Annual Meeting & Exposition, Minneapolis, Minnesota.  
<http://www.geosociety.org/meetings/2011>.

## INSITU Advance Tools Workshop held on June 22 and 23

The Michigan Department of Environmental Quality and the AIPG Michigan Section co-sponsored a workshop that showcased advancements with in-situ remediation methods on June 22 and 23 at the Ralph A. MacMullan (RAM) Conference Center on the north Shore of Higgins Lake. Kevin Lund and Sara Pearson co-chaired the event which was attended by approximately 100 people. Attendees included regulators, consultants, contractors and private industry.

The first day included presentations that reviewed microbiological processes, innovative laboratory tools, presentations on isotope analysis in biodegradation, and microbiological sampling equipment. A new topic for most attendees was using stable isotope analysis to understanding the origination of TCE sources; another line of evidence to demonstrate monitored natural attenuation, using Microcosm studies to screen remedial alternatives; or, answering that age old question, “Will the addition of oxygen promote the growth of bacteria capable of aerobic degradation of BTEX?”

The second day included a review of Public Act 451, Part 22 regulatory compliance process, discussions regarding In-situ failures and why these applications failed, a concept that it is cheaper to map a plume than to remediate a plume, and a presentation that a successful in-situ remedy deployment requires site specific theory/design, execution and definition of achievable endpoints. Several case studies presented examples of successful in-situ techniques applied in Michigan and other parts of the Midwest.



Even diner was a great opportunity for networking at the DEQ/AIPG Michigan Section IN-SITU Work Shop. Photograph courtesy of Kevin Lund.

Speakers for both days included academicians, regulators and consultants. The workshop benefitted from generous participation from Advanced Tools for In-situ Green Remediation, Mateco Drilling, Cemcor Environmental Services, Orin Remediation Technologies, In Ventures Technologies, Chemviron Midwest, Catskill, EOS Remediation, LLC, Regenesys and Adventus.



Networking at the DEQ/Michigan Section IN-SITU work shop around a campfire is a great start to solving challenging environmental problems. Photograph courtesy of Kevin Lund.

Workshop participants were enthusiastic about this learning and networking opportunity.

Some comments from attendees included:

“...an excellent outreach training of modern in-situ remediation technologies including the rules, successes and pitfalls. If these conferences and



training seminars are continued they should help to improve the remediation toolbox for Michigan consultants....”

“...The workshop provided many quality presentations and discussion about technical issues in areas of investigation and remediation. Most importantly, it showed MDEQ’s commitment to working with industry to develop a constructive problem solving dialogue. At several points during the discussion, MDEQ staffers reiterated the message that they were eager to work together to close sites...”

AIPG Michigan Section would like to continue fostering these types of activities through collaboration with the MDEQ. In order to continue and build on this success AIPG Michigan Section needs support from its membership through participation.



Outdoor presentations by vendors at the DEQ/AIPG Michigan Section IN-SITU work shop. Photograph courtesy of Kevin Lund.

Our goal was to deliver a cost effective forum to share in-situ remediation experience and establish networks between the MDEQ, Consultants and Industry. Given the numerous positive comments we exceeded our expectations. This was achieved through the planning and hard work of Kevin and Sara.

Color slides from the presentations given during the two day workshop will be available on the AIPG Michigan Section’s website. Be sure to check them out.

---

## Annual Golf Outing

2011 was a successful year for our Seventh Annual AIPG Michigan Chapter Golf Outing. 72 players enjoyed a day of golf and camaraderie for this year’s event. Proceeds from this event continue to support our K-12 educational grants.

The cool day facilitated the lowest score in the history of the event. A 16 under par 56 was posted by the foursome of Dave Guinn, James Laninga, Rick VerStrate, and Al Jordan.

The Grand Prize Raffle (I-Pad) was won by Curtis Lichy of GES. The 50/50 Raffle was won by Larry Kinsman of Orin Remediation Technologies.



The Bio-Chem sponsored foursome had the lowest score. Photograph courtesy of Bob Reichenbach.

Our sponsors, without whom this event would not take place, were as follows:

- Stock Well Drilling/The Underground Detective-Dinner
- Orin Remediation Technologies, Inc.-All Closest-to-Pin and Hole-in-One Prizes
- Fibertec-Beverage Oasis (Lori also helped with the Putt-For-Dough contest)
- Schrader Environmental Services-Longest Drive (men and women)

### Tee Box Sponsors:

- Accutest Laboratories
- Ashtead Technology Rentals
- EQ
- ERG
- GES
- MATECO Drilling
- Schrader Environmental Services

Goodie Bag Items and other raffle prizes were provided by:

- Ashtead Technology Rentals
- CEMCOR Marketing
- Pace Analytical
- The Underground Detective
- Wilcox Professional Services



Dale Schrader in action. Photograph courtesy of Bob Reichenbach.

Thank you to all our sponsors. Additional thanks to Sue Graves-ERG for assisting with the hole-in-one grand prize hole and taking team photographs. Photographs of the event are posted on the Michigan Section website. Thanks also to Jack Lanigan who assisted with registering golfers and sponsors.

Thanks to all attendees!

Bob Reichenbach, CPG and Kevin Lund, CPG – Michigan Section Golf Outing Co-Chairs

## Small Note About Educational Grants

How many of you know that the Michigan Section has an awards program and provides grants to educational applicants each year? Did you know that over the past several years the Section has provided Grants to a variety of applicants that ranged from \$500 to \$1,000 each? For those members that attend the last meeting in May, they have had the pleasure of witnessing the how those grants were utilized by a local school. The educational grants are a great opportunity to help your local school or organization that is involved in an earth science raise additional funds for a specific project. So spread the word that these grants are available for deserving groups and remember that the kids involved in these types of programs are the future membership of this and/or other AIPG Sections. The application forms can be found on the Section website or by contacting me directly at [Jason.lagowski@arcadis-us.com](mailto:Jason.lagowski@arcadis-us.com). Completed applications are due by November 15, 2011.

## May Section Meeting Summary

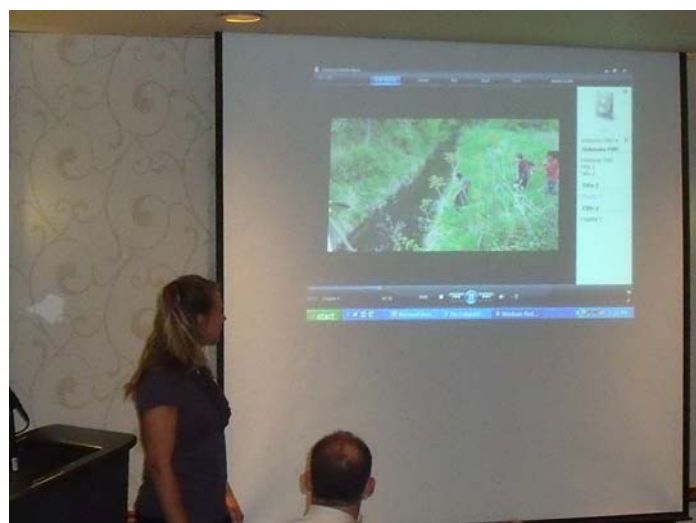
The AIPG Michigan Section held its second quarter meeting on Thursday, May 19 at the Radisson Riverfront in Grand Rapids. The meeting was attended by 33 people. The topic of the evenings' main presentation was Michigan's Regulatory Response to Oil and Gas Production in the

Collingwood Formation. The presentation was provided by three members of the Michigan Department of Environmental Quality, Office of Geologic Survey: Rick Henderson; Susanne Biteman; and Bill Duley. The subject matter is of current relevance both in Michigan and nationally as petroleum production via fracking methods has received increased publicity. We learned that Michigan has been ahead of most states in how it regulates certain aspects of petroleum production.



Speaker Bill Duley discussing the locations of the Collingwood and Utica formations in Michigan. Photograph courtesy of Adam Heft.

There was also a presentation from a recipient of an AIPG Michigan Section Education Grant. In December 2010 the Michigan Section awarded a grant to Kelloggsville Public Schools. Lynnea Roon of Kelloggsville Schools, who prepared the grant application, shared photographs and explained how the grant was used to enhance outdoor science lessons for third fourth and fifth graders. It was clear that the grant was put to good use.



Grant Awardee Lynnea Roon showing how the grant money was used. Photograph courtesy of Adam Heft.



---

## Welcome New Members

The Michigan Section is continuing to grow. Please welcome the following new CPGs, members, and students:

Susannah Duly, Leslie Park, Brian Beach, Rebecca Jones, Elyse Begnoche, Jeremy Conner, Autumn Haagsma, Angela DeGrandis, Ashley Saelens, Adam Brzak, Jonathan Bay, Thomas Price, Matthew McDonald, Joseph Mohan, Ethan Wologo, Amanda Nelson, Fred Roethlisberger, Jordan Redwine, Michael Pilot, Angel Pichla, Rebecca Harbison, Jamie Laginess, Chelsea Brooks, Anthony Moncada, and Aaron Garceau.

To each of our new members, the Michigan Section Executive Committee would like to welcome you to our section, and encourage you to attend section meetings and other events. You are also welcome to provide information for the Member's Corner articles.

---

## DEQ Workshop

Registration is now open!!

July 11, 2011 OR July 22, 2011

Workshop for the December 2010 Amendments to Part 201

Lansing Community College (LCC), West Campus, Auditorium, Lansing, MI

Presented by: DEQ Remediation Division

Led by staff of the Michigan Department of Environmental Quality (DEQ) Remediation Division, this one-day workshop is being offered on two separate days (live session or webinar both days) to provide an overview of recent amendments to Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

The training, designed primarily for consultants, attorneys and others wanting to gain a better understanding of the Part 201 amendments, will cover the most significant changes to the law, including: major revisions, sections repealed, rules rescinded/retained and new definitions, path to closure and clean-up criteria revisions, Response Activity Plans, No Further Action (NFA) reports, Response Activity Review Panel, Due Care and BEA provisions.

To register for the workshop (note: live and webinar sessions are separate registrations), please go to this location: [www.michigan.gov/deg](http://www.michigan.gov/deg), then from the left hand column, select "News and Events," "Training and Workshops," "Upcoming DEQ

Workshops," then click on the "July 11, 2011 or July 22, 2011 workshop item.

Space for the live workshop session at the LCC campus is limited (only 100 participants each day), so register early! For more information, please contact: Pat Lawton, DEQ Remediation, 517-373-9542 or [lawtonp1@michigan.gov](mailto:lawtonp1@michigan.gov).

Sara Pearson, CPG, MDEQ RD Senior Geologist, Grand Rapids District

---

## Annual Meeting Reminder

The Section Executive Committee would like to remind its members that this year's annual meeting will be held in Bloomingdale, Illinois, from September 10-13, 2011. This meeting is a good time to network with your peers from across the country. It will be the last meeting for the next few years that will be within easy driving distance of Michigan, so plan to attend if at all possible. The Michigan Section has provided a \$250 goodwill sponsorship of the meeting.

---

## Support our Sponsors!

The Section Executive Committee would like to remind its members to support the companies that are advertisers in the newsletter. Consider working with these companies, and when you speak with their representatives, let them know that you saw their ad in the Michigan Section newsletter.

---

## Newsletter Notice via E-mail

Please be sure that you continue to receive the Section newsletters and other announcements. Submit an updated e-mail address to Adam Heft at [heft@pbworld.com](mailto:heft@pbworld.com). If you move or change places of employment, don't forget to send your new contact information to both the Section and to National. If you are not receiving announcements directly from the editor, it is because your email address is not up to date.

---

## Section Website Reminders

As you may have noticed, the Michigan Section is working on building a database of geologic photographs on our website. We would like to continue building this collection. Please submit photographs that you are willing to share to Adam Heft at [heft@pbworld.com](mailto:heft@pbworld.com). Don't forget to include your name and a short explanation of what the photograph depicts. The photographs will be periodically uploaded to the website once several have been received.

You will also note that the Section website now has a history page. Currently it includes information on Douglas Houghton, Michigan's first State Geologist. We will be including information on the Section's

officers in the near future. If you have suggestions on other items that should be included on this page, please let a member of the Section Executive Committee know.

---

## **Member's Corner**

*The Member's Corner includes information about the Section's membership. This is your chance to provide information on where you are and what you are doing. Simply send the information to the Editor for inclusion in this section.*

*No Member's Corner submission was received for this edition of the newsletter.*

---

## **Employment Opportunities**

*To serve our members, and provide added value, the Michigan Section Executive Committee has decided to allow ads for employment opportunities to be posted in the Section newsletters. Employment ads will run for one edition unless renewed. There is no cost to our members or sponsors for this service. Send your employment opportunities to the editor.*

No employment opportunities were received prior to publication of this issue of the newsletter.

## Newsletter Sponsors



# ADVENTUS

*Solid Technology, Superior Value, Proven Results*

2871 W. Forest Road, Suite 2,  
Freeport, IL USA 61032  
Toll-free: 888.295.8661  
Fax: (+01) 815.235.3506

[www.AdventusGroup.com](http://www.AdventusGroup.com)

## PEARSON DRILLING CO.

6100 West Blue Road (M-55) • Lake City, Michigan 49651

**William F. Pearson, P.E.**  
President

231-839-4444  
231-839-3678 Fax

Email: [wpearson@pearsondrilling.biz](mailto:wpearson@pearsondrilling.biz)  
[www.pearsondrilling.biz](http://www.pearsondrilling.biz)

SOIL AND GROUNDWATER REMEDIATION

IN SITU BIOREMEDIATION AND CHEMICAL OXIDATION



### ORC ADVANCED

- Field-Proven, *In Situ*, Enhanced Aerobic Bioremediation
- Low-Cost and Highest Available Oxygen Content
- Patented Controlled-Release Technology

### 3-D MicroEmulsion

HRC ADVANCED<sup>®</sup>

- Less than 47¢ Per Pound as Applied
- Three Stage Hydrogen Release Profile
- Wide-Area / High-Volume Microemulsion Application

### RegenOx<sup>®</sup>

CHEMICAL OXIDATION REDEFINED


- Rapid, *In Situ* Chemical Oxidation of Target Contaminants
- Safe and Easy to Handle Compared to other Chemical Oxidants
- Treats both Petroleum and Chlorinated Hydrocarbons

Local Representative - Barry Poling  
Central U.S. Regional Manager / (812) 923-7999 / [bpoling@regenesiss.com](mailto:bpoling@regenesiss.com)  
FOR MORE INFORMATION OR A FREE APPLICATION DESIGN  
AND COST ESTIMATE CALL 949-366-8000  
OR VISIT [WWW.REGENESIS.COM](http://WWW.REGENESIS.COM)



## REGENESIS

Advanced Technologies for Contaminated Site Remediation



## RAU DRILLING

BAY CITY • MICHIGAN

Ph: 989-893-8635  
Fax: 989-893-9693

Environmental • Geotechnical  
[raudrilling@sbcglobal.net](mailto:raudrilling@sbcglobal.net)

351 North Tuscola Road  
Bay City, MI 48708

## EQ – THE ENVIRONMENTAL QUALITY COMPANY

Total Waste Management  
Industrial Cleaning  
Waste Treatment  
Transportation  
Remediation  
Recycling  
Waste Disposal  
Technical Services  
Emergency Response  
Wastewater Treatment



## EQ IS THE ANSWER

36255 Michigan Avenue  
Wayne, Michigan 48184  
(800) 592-5489 [www.EQonline.com](http://www.EQonline.com)





## WORKING TOGETHER TO PROTECT OUR ENVIRONMENT AND IMPROVE OUR HEALTH

### Pace Analytical: Providing Local and National Laboratory Coverage for Michigan

- Nationwide Coverage / Locations and Certifications
- Full Service Environmental Capabilities
- Major National Account Program Team
- "One Stop Shop" Services (e.g., air toxics, aquatic toxicity, dioxin analysis, low level mercury, radiochemistry and more)
- Federal and State Regulatory Knowledge
- Flexible Response to Demand
- Online Data Access and Management / PacePort
- On-time Delivery
- Innovative Test Reports and Specialized EDDs
- Single Point of Contact / Dedicated Project Management
- Customized Bottle Orders
- Convenient Courier Services
- Quality Systems Training, Audits (external and internal)
- Extensive Formalized Safety Program
- Continuous Improvement Training for Process, Productivity and Performance



Contact Dan Goeddeke  
Michigan Sales Representative  
Dan.Gooddeke@pacelabs.com  
PH: (248) 996-7244  
www.pacelabs.com



## EverydayBrilliance

*Brilliant engineering solutions - delivered daily.*



**NTH Consultants, Ltd.**

Infrastructure Engineering  
and Environmental Services

(800) 736-6842  
www.nthconsultants.com

NTH Consultants, Ltd.  
(NTH) employs a team of geologists, engineers, and regulatory professionals with extensive knowledge and experience in performing geologic, geotechnical, and environmental site investigations.

As a nationally recognized engineering firm, NTH has been specializing in geotechnical, environmental, and facilities engineering since 1968.





- Civil Engineering
- GeoEnvironmental & Remediation Services
- Geotechnical Engineering & Mining
- Insurance Services
- Water Resources

5892 Sterling Drive  
Howell, MI 48843

**877-550-4224**

For a growing list of office locations, please visit us online at [www.bcieng.com](http://www.bcieng.com).



## FONDRIEST

ENVIRONMENTAL MONITORING PRODUCTS

water quality • groundwater • hydrology • survey  
data logging • soil • weather • field gear

when your  
**research**  
demands  
**quality data**

888.426.2151 p  
937.426.1125 f  
[www.Fondriest.com](http://www.Fondriest.com)



Geotechnical & Environmental Drilling Services  
Since 1974

### MATECO Drilling

Introduces the  
Geoprobe® 8140 DT Rotary Sonic

- Impressive Power / Compact Package
- Powered with a Geoprobe® GV-4 Sonic Head
- Equipped with Remote Control and Rubber Tracks
- Handles 4x6 Tooling

800-968-3475 • [www.mateco.com](http://www.mateco.com)



ENVIRONMENTAL DRILLING  
AND  
CONTRACTING INC.

KIRK JOHNSON  
PRESIDENT  
4692 - 136th Avenue  
Holland, MI 49424

Ph. (616) 738-9300  
Cell (616) 403-6723  
Fax (616) 738-8135  
email: [edac@tds.net](mailto:edac@tds.net)



540 Leonard NW, Suite G  
Grand Rapids, MI 49504

(616) 458-7980  
(800) 793-4565  
Cell: (616) 299-0136

[www.aqua-techconsultants.com](http://www.aqua-techconsultants.com)  
[laustin@aquatechconsultants.com](mailto:laustin@aquatechconsultants.com)

Lawrence M. Austin, CPG  
President

*Environmental & Hydrogeological  
Assessment and Remediation*



# RENTALS • SALES • SERVICE



## A sample of our rental inventory:

- GPS
- Groundwater Sampling Equipment
- PIDs/FIDs
- Soil Sampling Kits
- Toxic Gas Monitors
- XRF Guns for Soil Sampling
- And much more!!

To view our complete inventory on line please visit  
[www.ashtead-technology.com](http://www.ashtead-technology.com)

**Call us toll-free 800-242-3910**



The Ashtead office servicing your area is located at:  
Park 100 7144 Zionsville Rd., Indianapolis, IN 46268 • 317-238-3441



## Fibertec The Choice of Environmental Professionals

- » Analytical Laboratory
- » Geoprobe/Subsurface Investigations
- » Industrial Hygiene
- » NELAC Accredited
- » Electronic Data Deliverables (EDDs)
- » Private Utility Locating

Holt • Brighton • Cadillac (517)699-0345 [www.fibertec.us](http://www.fibertec.us)





YOUR LAB OF CHOICE

**Founded 1970**

**We are the largest and most certified single location  
environmental lab in the US**

**Analytical Services**

**Water - Drinking Water - Mold**

**Soil/Solid Waste - Biological - Air**

**NELAP, A2LA, AIHA, Corps of Engineers**

**IHLAP, ELLAP, EMLAP, USDA**

**Internet Access - Password Protected Web Site**

**Custom Sampling Kits - Saturday Receiving**

ESC Lab Sciences is equipped and certified to support  
your work nationwide from one location.

ONE phone call, ONE point of contact, ONE laboratory.

No other lab is as accessible or prepared to handle your  
needs throughout the country.

Our presence is nationwide, but our imprint is green.  
ESC Lab Sciences is setting the industry standard in  
deploying sustainable practices, including energy  
efficiency and solvent recovery.

Please Contact Duane Hattem at (616) 307-1587 or [dhattem@esclabsciences.com](mailto:dhattem@esclabsciences.com)

[www.esclabsciences.com](http://www.esclabsciences.com)



6215 Lehman Drive  
Flint, MI 48507

Ph# (810) 877-7176 Fax # (810) 877-7156

**Boart Longyear is a one stop shop for  
all your drilling needs.**

- Environmental Drilling Services
- Geotechnical Drilling Services
- Mineral Exploration
- Aggregate Exploration
- Pump Services
- Offices Nationwide/Worldwide

**Flint, MI Equipment List**

- (4) 6600 Geoprobe® (Truck and Track Mounted)
- (1) BK-81 Truck Mounted H S A Drill (4.25" to 12.25" H S A's)
- (2) Tight Access 5400 Geoprobe® machines
- (3) Track Mounted Mini Sonic Drills capable of 6" dia. to 150' TD and 10" diameter to 50'.
- (2) Track Mounted Full Size ATV Sonic Drills capable of 6" dia. to 600' depths and up to 12" diameter up to 100' depths.
- (2) Truck Mounted Full Size Sonic Drills capable of 6" dia. to 600' depths and up to 12" diameter up to 100' depths.
- (2) VacMaster 1000 (Air Knives)

**Michigan Chapter  
American Institute of Professional Geologists  
MEETING ANNOUNCEMENT**

**September 22, 2011**

**DEVELOPMENT OF THE “BACK 40” PRECIOUS METALS PROJECT IN  
LAKE TOWNSHIP, MENOMINEE COUNTY, MICHIGAN**

Featured Speaker:

[Richard Lassin, PG](#)

**Location:** University Center, Central Michigan University, Mt. Pleasant, MI (Map attached)

**Cost:** Students Free, Members \$35.00, Non-members \$40.00 Registration is payable at the door by cash or check; however, prepayment is preferred and speeds up the check-in process at the door. *Please note: Cancellations made within 24 hours of the meeting and/or “No Shows” will be charged and expected to pay the registration fee.*

**Dinner:** Home-Style Buffet – includes chicken oscar, beef stir-fry, and cheese ravioli with tomato basil sauce, garden salad, roasted redskin potatoes, fresh green beans and apple pie.

**Time:** Cash Bar 5:30-6:30 PM, Dinner 6:30 PM, and Speaker 7:30-8:30 PM

**RSVP:** Craig Savage, at [csavage@gfnet.com](mailto:csavage@gfnet.com) no later than September 19, 2011. Please include AIPG in the subject line. Checks may be mailed to Craig at this address: c/o Gannett Fleming of Michigan, Inc., 17901 Woodland Drive, Suites 900-1000, New Boston, MI 48164. Payment may also be made at the door.

**Richard Lassin** is a retired geologist with a Masters in Geology from Northern Illinois University and a former Director of Aquila Resources. His previous work included mining exploration for precious metals and uranium in the Lake Superior Mineral District. He is one of the discoverers of what has become the “Back 40” mining project.

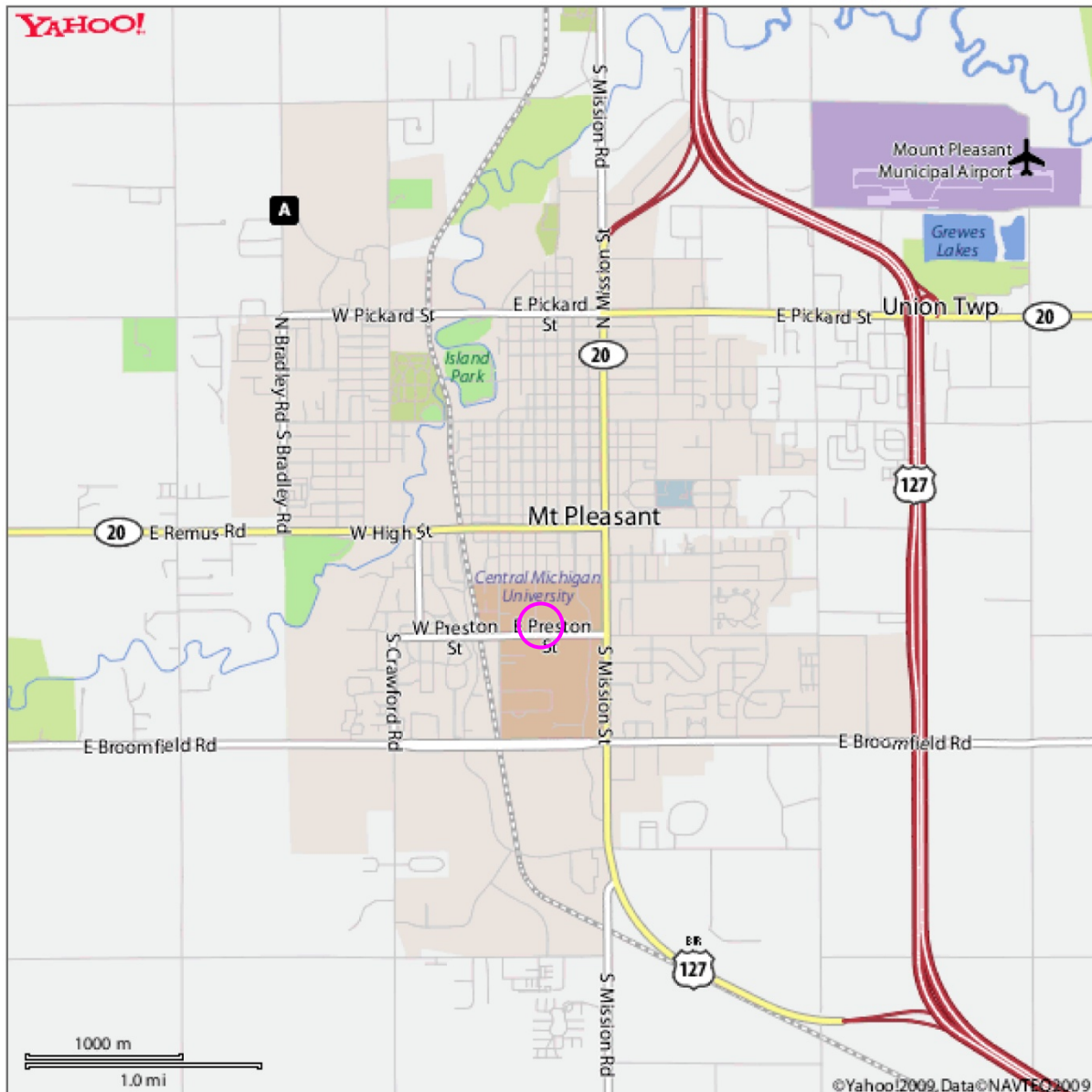
The Back 40 Project, in Menominee County, is an advanced stage exploration project delineating a zinc and gold-rich volcanogenic massive sulfide deposit. Early in 2002, drill testing of a geophysical anomaly resulted in the discovery of the massive sulfide deposit. Subsequent drilling totaling over 90,000 meters has defined significant zinc-gold-copper-silver mineralization. The Back Forty deposit is comprised of massive sulfide, stringer, gossan, and gold-only mineralization, each with high-grade components. Massive sulfide has been traced along strike for nearly 1 kilometer and to a vertical depth of 700 meters. The resource estimate includes 17.94 million tonnes of measured plus indicated metals (gold, silver, zinc and copper) and an additional 3.37 million tonnes inferred.

# AIPG Section Meeting September 22, 2011

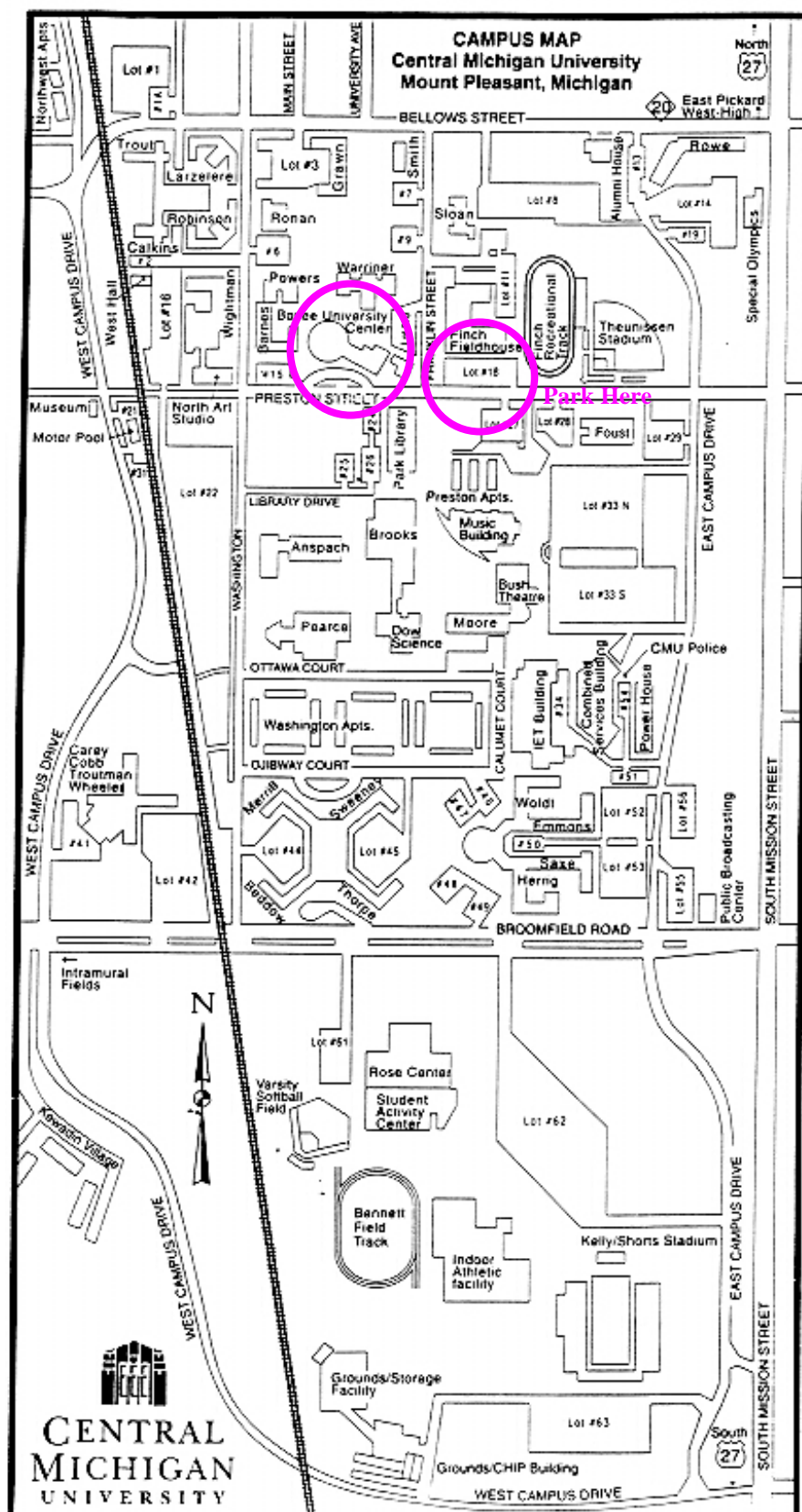
University Center, Central Michigan University, Mt. Pleasant

Map of Mount Pleasant, MI 48859

YAHOO!®







**Michigan Chapter  
American Institute of Professional Geologists  
FIELD TRIP ANNOUNCEMENT**

**AUGUST 12 & 13, 2011**

**NORTHEAST MICHIGAN KARST FEATURES –  
“INFLUENCES ON AND EFFECTS FROM BEDROCK TOPOGRAPHY,”  
ALPENA GLASS BOTTOM BOAT SHIPWRECK TOUR,  
AND ROCKPORT QUARRY**

**Locations:** Northeast Michigan Karst Stops, Alpena and Presque Isle County, Michigan  
Alpena Glass Bottom Boat Shipwreck Tour, 500 W. Fletcher Street, Alpena, Michigan  
Rockport Quarry, Rockport Road, Alpena, Michigan

*The AIPG Michigan Section is extending an invitation to all geologists, friends, and families to join us in a field trip to see the Karst features of northeastern Michigan, the Thunder Bay National Marine Sanctuary and Glass Bottom Boat Tour, and the Rockport Quarry Fossil Park.*

The field trip will kick off Friday at 10:00 a.m. with a driving tour of the Karst features in northeastern Michigan with several stops along the way including some hiking to view sink holes, earth cracks, and disappearing streams, etc.... DEQ geologists and local Karst experts Ty Black, David Lawrence, and Alexander Code will be our guides.

Saturday morning will begin at 10:00 a.m. with a brief visit to the Thunder Bay National Marine Sanctuary at the Maritime Heritage Center before we catch the Alpena Glass Bottom Boat Shipwreck Tour at 11:00 a.m.. The crystal clear waters and the large 'glass bottom' viewing wells allow you to dive the wrecks - without getting wet! The cruise is 2½ hours and we will experience magnificently preserved shipwrecks, scenic shorelines and majestic lighthouses. We will also learn about the history, legends and lore of Thunder Bay and many famous shipwrecks as we cruise the shoreline. The 65 ft. 'Lady Michigan' will take us on a comfortable adventure into the heart of Lake Huron's Shipwreck Alley. The boat tour also goes over the limestone ridges that affected shipping.

Following the boat tour, we will go to the Rockport Quarry to collect fossils from the Devonian Period. This section is particularly important since this is the only location where the whole section of the Rockport Limestone is exposed. The Rockport is abundant in fossils of brachiopods, crinoids, corals (excellent heads of hexagonaria), etc... Hopefully, the weather will be fantastic and everyone will be free to collect for the remainder of the day.

**Cost:** \$30.00 per adult and \$10.00 per child (ages 6-12) for the Glass Bottom Boat Tour. Children five and under are free on the boat. If we have more than 20 in our group, the price for adults will be \$27.00 and children ages 6-12 will be \$8.00. Meals are not included. Make your own arrangements for lodging. The link provides several locations for hotels or campsites in the area <http://www.alpenacvb.com>. The Holiday Inn is located at 1000 US-23 North, Alpena, 1-989-356-2151 or 1 (800) 315-2621 and the recommended campground is the Ossineke State Forest Campground on the shores of Lake Huron.

Join us and bring the family. It's going to be fun! A more complete itinerary will be sent to those who RSVP. Hope to see you this summer!

**For more info & RSVP:** Please contact Sara Pearson at [pearsons@michigan.gov](mailto:pearsons@michigan.gov) or (616) 356-0253 no later than July 25, 2011. If we have less than 10 RSVPs, we will cancel the trip.