



American Institute of Professional Geologists Michigan Section

July 2015

From the President's Desk



It's official; we have managed to out-do ourselves with another successful technical workshop. If you have not allowed yourself to partake in this event, plan ahead for next year. AIPG's technical workshop provides high level and innovative case-study solutions to complex site models. In

partnership with MDEQ, we are able to produce a technical program that not only provides guidance for your remediation projects but also offers a casual atmosphere for interacting with our state regulators as well as the regulated community alike.

Looking forward, we are pulling together the final details for an AIPG field trip to Drummond Island; and collaborating with Western Michigan University and Stock Drilling, Inc. to provide a drilling demonstration at the Waterloo Recreation Area in Chelsea, Michigan in conjunction with WMU's hydrogeology field camp. Students will have the opportunity to witness multiple drill methods and installation of groundwater monitoring wells.

AIPG Michigan takes pride in our commitment to education and growing our profession. Geoscience students who are active in AIPG are provided with tremendous opportunities to advance their education. They are introduced to professional geologists and geological engineers whom quickly become mentors who can provide technical guidance and career advice. Please continue to encourage students to stay active with AIPG, they are the future of our profession.

After serving nearly 10 years on the executive committee, I can honestly say it has been a rewarding experience. AIPG, as an organization, amazes me with the willingness of its members to step up each year to volunteer for leadership roles

and support the profession. If you are interested in serving on the executive committee and have questions, please give me a call.

Dawn Prell, CPG – 2015 Michigan Section President

Section Officers Reports

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

Vice President (Brian Burke): I'm very pleased to



say that Michigan Section field trips are back! Our first field trip of 2015 was an excursion down into the Detroit Salt Company mine in April. The field trip was co-sponsored by our good friends at the Michigan Basin Geological Society (MBGS). Sixteen lucky lottery winners were equipped with mine

safety gear and lowered over 1,000 feet below the city streets to tour the 100-year old, active Detroit salt mine. Here is some background from a paper written in 2013 by WMU's distinguished professor William Harrison III:

"...The mine extracts salt through a room and pillar mining process from the Silurian Salina "F" formation. The salt is used primarily as crushed salt for ice control throughout the upper Midwest. The company is mining a 30-foot thick seam of bedded halite. Thin beds of anhydrite and/or dolomite are occasionally inter-bedded with the high-purity halite...The salt...was created about 400 million years ago... as a result of salt water oceans pouring into a huge basin in Michigan, evaporating and leaving huge salt deposits behind in the process. (Harrison, 2013)..."

Attendees were driven to the active mine face and allowed to ponder the evaporation of an ancient sea

and search for perfect halite crystals. If you attended our 2015 Work Shop at the RAM Center, I left samples on the front desk outside the auditorium for you to enjoy. Needless to say, this field trip is on every Michigan geologist's bucket list so we will try to organize additional trips in the future. Special thanks to our good friends at MBGS for helping us arrange this trip.



Halite Crystal from the salt mine. Photo courtesy of Brian Burke.

If you weren't one of the lucky 16 but are itching to comb ancient sea floor deposits, we have a new trip for you to consider. Treasurer, Linda Hensel, has arranged a fossil hunting trip to Drummond Island in August. Make sure you read Linda's column in this month's newsletter for details. If you have an interest planning future field trips, please let us know. Looking forward to seeing all of you in the near future at one of our events.

Treasurer (Linda Hensel): I am happy to report that the AIPG MI Section is in good financial standing. The recent annual golf outing (May 19, 2015) and summer workshop (June 16 and 17, 2015) were successful and also provided us with additional income. Our primary goal is to continue to cultivate interest in the geosciences as a



career and provide scholarships to college students.

I want to personally thank the 2015 MI Section Workshop Co-Chairs Sara Pearson and Rick Dunkin for the excellent workshop on Site Characterization that they put together and for their time to carry the burden of executing the workshop so well. Very well done Sara and Rick!!

Please feel free to contact any of us on the 2015 Executive Committee if you have any suggestions or ideas for future activities.

Secretary (Tim Woodburne): You are a member of a great Section of AIPG here in Michigan. As you can see from the articles in this newsletter, we have a lot to offer to you!



I really encourage you to attend one of our quarterly meetings and try to become a regular at the annual workshops. Each

Workshop has become better and I believe that this was our best yet! We should all look forward to the field trip that Linda is planning, and to our annual meeting in December when the next Secretary will be elected. If you are considering running for the secretary position, feel free to contact me and I will be happy to talk to you about what is expected so you have an idea of time commitment and level of effort. I hope you are excited about this section and the things we are doing.

My personal takeaway from the Site Characterization Workshop is just how important it is that we understand what is going on underground and how to select the correct remedy for closure. Therefore, consider how important our contributions are as geologists to characterize a site!! And then think about how much of an impact that has not only to us personally but also to our society. To all of you: keep doing good work! It is sometimes hard, I know, but keep at it with the overall goal of providing a contribution towards making Michigan and our society a better place.

Past President (Craig Savage): No report.



Coming Events

October 1, 2015: Michigan Section AIPG Meeting, Eberhard Center at Grand Valley State University, Grand Rapids. Speaker and meeting details to be announced.

Location: Eberhard Center, Grand Valley State University, Grand Rapids.

Dinner: Cherry Pecan Chicken - Fresh grilled boneless skinless chicken breast glazed with fruit chutney. Served over a pasta rice blend of wild rice, white rice, and toasted orzo and garnished with steamed sugar peas, Honey Maple Salmon - An eight-ounce hand cut filet of salmon enhanced with a blend of honey and maple. Served with wild rice and fresh steamed asparagus, or Cheese Tortellini - A tangy blend of cheeses, fresh vegetables and spinach are baked to perfection.

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

Cost: Students free, Members \$30.00, Non-members \$50.00.

RSVP by September 28, 2015: RSVP for the meeting on the Eventbrite website no later than September 28th at: <https://www.eventbrite.com/e/aipg-section-meeting-tickets-17532144115>.

September 19-22, 2015: 52nd Annual AIPG Meeting to be held in Anchorage, Alaska. Details available on the National AIPG website www.aipg.org.

December 10, 2015: Michigan Section Annual Meeting to be held at the Kellogg Center in East Lansing. Speaker and meeting details to be announced.

September 9-13, 2016: 53rd Annual AIPG Meeting to be held in Santa Fe, New Mexico. Details available on the National AIPG website www.aipg.org.

2015 Golf Outing

The air on May 19, 2015 was a little cool, but it turned out to be a great day for our 11th Annual AIPG Michigan Chapter Golf Outing. 84 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 winning golf team was the Nesa & Associates foursome led by Abdul Abdul.



The winning foursome (Abdul Abdul, Jeshua Hansen, Andy Khurna, and Monty Fakhouri) – Congratulations! Photo courtesy of Bob Reichenbach.

The Grand Prize winner of a GoPro High Performance camera was won by Craig Marlow of Cemcor Marketing. The 50/50 Raffle was won by Brian Palys of MATECO Drilling Co. Skill prize winners were Kimberly Suchyta/Abdul Abdul (Long Drive awards) and Kimberly Suchyta/Bob Reichenbach (Closest to Pin awards).



Laura Lambert and the baby Sandhill Crane. Photo courtesy of Bob Reichenbach.

Our main sponsors were:

- Cascade Drilling – Hole-in-One Sponsor
- Fibertec -Practice Tee Sponsor

Tee Box Sponsors:

- Environmental Resources Group (ERG)
- Stantec
- Groundwater & Environmental Services (GES)
- Job Site Services (2)
- Geosyntec Consultants
- MATECO Drilling
- Orin Remediation
- Lake Michigan Credit Union

Door Prize Sponsors:

- Cascade Drilling
- Stantec

Thank you to all our sponsors. Additional thanks to Cheri DeLyon and Stacy Kotecki (Fibertec), Craig Savage for assisting with registration, Linda Hensel for helping with registration and handling our putting contest, Cindy Louiselle and Samantha Sage (ERG) for helping with the hole-in-one grand prize hole, and team photographs. Cindy, Samantha and Laura Lambert (ERG) also assisted with the raffles and awards presentation. I would also like to thank the staff at Lyon Oaks Golf Course for their continued excellent service provided for our event.

Thanks to all attendees!

Bob Reichenbach - Golf Outing Chairman

2015 Annual Meeting Reminder

Editor's Note: This article appeared in the last edition of the newsletter. We ask that if you plan to attend the annual meeting, to contact either Adam Heft or Brian Burke. We would like to get a group photograph of all Michigan Section attendees at the meeting.

If you hadn't already heard, the AIPG 2015 Annual Meeting will be held in Anchorage, Alaska!! If you have even considered visiting The Last Frontier at any point in the past, this is your opportunity to make the trek.

The Alaska Section is looking forward to sharing so much that our amazing state has to offer; unique and complex geology, northern flora and fauna, and breathtaking scenery!! The meeting location is at the Hilton Hotel in the heart of downtown Anchorage, with access to the rich history of our town (Anchorage celebrates the 51st anniversary of the 1964 earthquake and its Centennial this year!), modern amenities (shopping and entertainment), plus quick access to some of the country's most incredible state and national parks.



Denali National Park. Photo courtesy of the National Park Service.

The appeal of Alaska speaks for itself, but if you need further convincing, we have several excellent field trips and speakers lined up (the call for

abstracts is open at <http://www.aipg.org/abstract/>). The full field trip descriptions will be provided soon on <http://www.aipg.org/>, but below is a sampling of the fantastic field trips we have lined up:

- Turnagain Arm Geology Tour (Portage Glacier, Whittier Tunnel, Seward Highway Geology)
- Anchorage Geology Tour (1964 Earthquake tour, Alaska Geological Materials Center)
- Denali National Park and Healy Valley Coal Mine (two days)
- Glacial Geology of the Upper Kenai Peninsula (two days)
- Wishbone Hill and Matanuska-Susitna Valley (fossil hunting and coal deposits)
- Pre-meeting Fairbanks trip (Permafrost Tunnel & Fort Knox Gold Mine)

September weather in South-central Alaska is typically mild, with evening and morning temps in the 40s and daytime highs in the 50s. We recommend dressing in layers, and being prepared for rain and cool weather, especially along Cook Inlet and Turnagain Arm.

Downtown Anchorage hosts a variety of activities within walking distance of the Hilton, with many fabulous restaurants and local bars, several art galleries and historic buildings, and the Tony Knowles Coastal Trail to stretch your legs and offer sightseeing vantages. For more information in planning your stay, please be sure to visit the Anchorage Visitor's Convention Bureau (<http://www.anchorage.net/>).

We look forward to seeing the Michigan Section in September!!!



Sunrise north of Palmer. Photo courtesy of Keri Nutter.

Member Input Sought

The Section Executive Committee is seeking input from members on a variety of topics. Do you have any suggestions regarding speakers/presentation topics that you would like to hear? What about field trips or other events? Some place you'd like to see us go, or something you think the membership would enjoy doing? Then make your voice heard; please send your suggestions to one of the members of the Executive Committee; any of the six members would be glad to hear from you. AIPG is your organization. Please help keep it relevant and interesting for all by participating.

2015 Summer Field Trip Information

The Michigan Section AIPG 2015 summer field trip will be held on Drummond Island and in the very easternmost sections of Chippewa County (in the vicinity of DeTour Village and Raber, Michigan). This area is beautiful and will interest geologists and their families and guests alike.

The trip will start on Friday, July 31st with a visit to the Osborne Materials Drummond Island Quarry. Trip participants will board a bus on Drummond Island that will take them into the active quarry to view current operations. A member of the Osborne Materials management will accompany participants. We will be able to examine rock from their current active quarry in an area away from their active quarrying operation. From there, participants will enter the closed quarry, where we will have access to the Engadine Formation; sample collection is encouraged. If time permits, we may view additional outcrops in the area. The evening's activities will conclude with a group whitefish dinner.

Other activities available on the island include kayaking, biking, golfing, fishing and relaxing. The well-known "The Rock" golf course, built by Tom Monaghan, former Domino's Pizza owner, is a challenging course and is a good way to enjoy the north-central island area. The Harbor Island National Wildlife Refuge, which is a well-known bird sanctuary, is located north of "The Rock" golf course and is accessible by boat, canoe and kayak. Ships up to 1,000 feet in length navigate these narrow waters on their way upbound and downbound to the Soo Locks. You can check on the status of the location of ships in the area via the website, www.boatnerd.com, click on vessel passage (left side of screen) and then click on ship location. A map on the website also shows the physical location and name of each ship. You almost feel like you can touch these ships as they are very close to you, especially at the DeTour Island Ferry Crossing and

at the Rock Cut, located north of DeTour Village approximately 10 miles. You will love to see these ships so close and you too will become a freighter watcher.

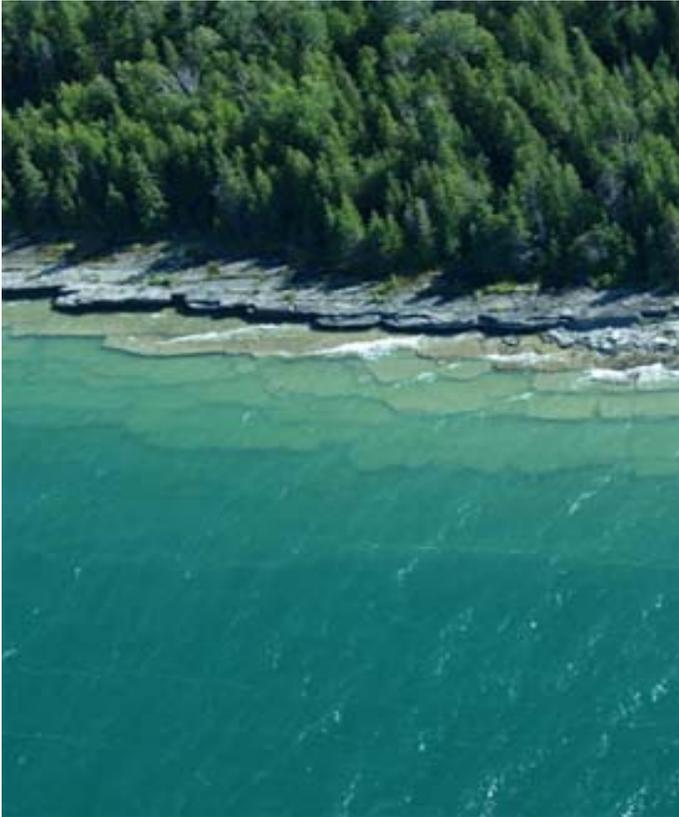
Saturday morning (August 1st) the group will visit a local rock shop and see processing of puddingstones. Participants will have an opportunity to shop for rock and mineral samples if desired. From the rock shop, participants will caravan to the Silurian Fossil Ledges. Note that the road leading to the ledges is inaccessible by most cars – a truck may be required to navigate the road successfully. Trip participants may carpool if they don't have a vehicle that will be able to traverse the road. The ledges are an excellent location for viewing fossils (please do not damage the ledges – the outcrop is protected, and there are plenty of pieces of the ledges that have broken off and are along the water).

The ledges can be seen from both the shore and from the water; kayaks will be available for rent for those that would like to view them from the water, and will be delivered for us to the ledges location. Please indicate you would like to rent kayaks when you RSVP for the field trip. The trip participants will spend the afternoon viewing the ledges. A group barbeque dinner and bonfire will be held that evening for those that wish to participate.

Sunday morning participants will take the ferry back to the mainland and will meet in the ferry parking lot. The group will travel along the west bank of the St. Mary's River from Detour to the Rock Cut. Participants will spend a few hours along the cut viewing exposed rock blasted from the channel, and will have the opportunity to observe down-bound shipping traffic from the Sault Locks.

The De Tour passage and Lighthouse are very cool places, the ships are very close to shore in the Village of DeTour and along the St. Mary's River between Lime Island and Raber (to the north) and DeTour Village (to the south). The DeTour Island Lighthouse is located close to DeTour Village and marks the passage for ship traffic entering the St. Mary's River from Lake Huron. Tours are available by boat from DeTour and will be arranged if we have enough interested participants. We will try to arrange a lighthouse tour of the De Tour passage lighthouse for those interested. A list of other places to view outcrops in the area and near the Straits of Mackinac in the St. Ignace area will be provided.

The field trip will conclude with the visit to the Rock Cut. Participants will then travel to additional destinations on their own or leave for home. A field handout and outcrop locator for other outcrops in the area will be given to all participants so they can stop and see these outcrops on their way home after the fieldtrip.



Aerial view of the Fossil Ledges. Photo by D. Sandell.

There are a number of places to camp and rent cabins in the DeTour Village, Drummond Island and Les Cheneaux Island chain areas. There are both private and national forest campgrounds. The Drummond Island Township campground and the Trailhead campground on Drummond Island are good places with water and showers. Additional information on options for camping or motel/cabins will be provided to those that RSVP for the trip. A field trip flyer with information will be sent out with a separate announcement by early July. Please RSVP to Linda Hensel no later than July 17th.

We hope you will join us on the 2015 Summer Field Trip!

Linda Hensel, CPG – Field Trip Chairperson

AIPG Section Leadership Award

The Michigan Section is pleased to announce that one of the 2015 Section Leadership Award recipients is our own **Sara Pearson!**

This award is given by the National Executive Committee during the Annual Meeting, and is intended to recognize members that have demonstrated a long-term commitment and have been long-term contributors to AIPG at the section level.

Please join the Section Executive Committee in thanking Sara for the active role she takes in the Section's activities.

Congratulations Sara!!

Michigan Section Workshop Recap

The Michigan Section held its 5th Annual Workshop (technical conference) on June 16th and 17th along the beautiful north shore of Higgins Lake at the Ralph A. MacMullan (RAM) Conference Center. The featured topic for this conference was Site Characterization.



Meeting attendees listening to one of the technical presentations Tuesday morning. Photograph courtesy of Adam Heft.

This year's workshop was very well attended (it broke last year's attendance record), with 209 registered participants, and an average daily registration of 205. The technical presentations were filled almost to capacity, with only a few seats left.



Meeting attendees enjoying lunch down by the lake. Photograph courtesy of Adam Heft.

A total of 23 speakers, plus the keynote speaker (Dan Rogers) and the panelists (Dan Rogers, Bob

Wagner, Grant Trigger, and Jim Cuthbertson) participated in the conference.



Tom Howe (right center) preparing to fire up his aerial drone. The drone flew an automatic mission over the conference facility, and is capable of generating aerial maps. Photograph courtesy of Adam Heft.

The social networking event on Tuesday night was a huge success after the field demonstrations and went well into the night. Participants enjoyed spirited discussions, a variety of tasty cold beverages, and snacks. Those individuals staying at one of the nearby off-site hotels could take advantage of a shuttle service between the hotel and the RAM center.



Attendees enjoying a variety of beverages during the Tuesday evening social mixer around one of three bonfires. Photograph courtesy of Adam Heft.

The Michigan Section appreciates the support of 24 sponsors this year, many of whom exhibited their companies' services in the hallway or the Manistee River exhibit room, where we provided our refreshments during meeting breaks. Continuing education credits were made available to our attendees, upon request.



Attendees enjoying a variety of beverages and playing cards during the Tuesday evening social mixer. Photograph courtesy of Adam Heft.

The food provided for the meals was, as usual, excellent. Attendees enjoyed pulled pork barbecue for lunch on Tuesday, followed by steak or whitefish for dinner. Lunch Wednesday was brats and hamburgers, and BBQ ribs or salmon for dinner. A build your own ice cream float event occurred during the afternoon break on Wednesday.



Attendees enjoying the Ice Cream social break Wednesday afternoon. Photograph courtesy of Adam Heft.

The workshop concluded with a drawing for a variety of items; the items (and winners) included two \$100 prepaid Mastercards (Cheryl Wilson and Jeff Spruit), AIPG sample bags (Pisha Williams), a bottle of Crowne Royal (Chuck Saari), a wine tapping kit (Nick Welty), a business planner (Kelly Cratsenburg), three AIPG pen/pencil sets (Terri Golla, Dave Monet, and Steve Zayko), three AIPG travel mugs (Rob MacCleod, Melissa Powers, and Tom Pavlik), four shirts from the RAM center (Autumn Lawson, Troy Helmik, Pete Shirey, and Eric Benson), an AIPG polo shirt (Joe Quinnen), and three Amazon gift cards (Beth Mead-O'Brien, Ray Govus, and Paul Knoerr). The drawings were made from those completing a

survey about the workshop, and had to be present to win. Congratulations to all winners!



Sara Pearson (left) with Cheryl Wilson, one of the two grand prize drawing winners. Meeting co-chair Rick Dunkin is in the background. Photograph courtesy of Adam Heft.

The Workshop Planning Committee consisted of co-chairs Sara Pearson and Rick Dunkin, along with AIPG MI Section Executive Committee members Craig Savage, Dawn Prell, Brian Burke, Linda Hensel, Tim Woodburne, and Adam Heft.

Adam Heft, CPG #10265, Michigan Section Newsletter Editor

Michigan Department of Environmental Quality News

Gov. Rick Snyder makes initial appointments to Underground Storage Tank Authority Board

Gov. Rick Snyder announced the appointments of John Dimmick, of Marcellus, Juman Doleh-Alomary, of Canton, Brian Eggers, Sr., of Linwood, Greg Gould, of Livonia, Bill Saad, of Grosse Ile, and Grenetta Thomassey, of Petoskey, to the newly created Underground Storage Tank Authority Board in June.

Established by Public Act 416 of 2014 and housed within the Michigan Department of Environmental Quality, the six-member board oversees the creation of a separate fund to pay for corrective action to be taken on leaking underground tanks and the revision of eligibility requirements that must be met by claimants.

"This is an experienced group of appointees from across the industry," Snyder said. "I applaud their commitment to the environment and public safety and look forward to seeing the solutions they present for addressing and stemming the issues posed by underground storage tanks."

Dimmick is vice president of Walters Dimmick Petroleum, Inc. He is a member of the Michigan Petroleum Association Board of Directors, the Indiana and Ohio Oil Marketers Associations, the National Association of Convenience Stores, Michigan Shell Jobbers Scholarship Foundation President, and is a member and past president of Three Rivers Area Chamber of Commerce. He represents individuals from independent petroleum marketers and serves a one-year term expiring May 25, 2016.

Doleh-Alomary is IT audit director at Wayne State University and president of the Arab American Women's Business Council. She earned a bachelor's degree in applied mathematics and a master's degree in computer engineering from the University of Michigan– Dearborn. She represents the general public and serves a two-year term to expire May 25, 2017.

Eggers is a principal founder of AKT Peerless Environmental Services and is a mechanical contractor and a certified underground storage tank professional. He is a member of the Michigan Chamber of Commerce, a board member of the Great Lakes Bay Region of First Merit Bank and Hartley Outdoor Education Center, and serves as co-chair of the Michigan Water Use Advisory Council. He represents individuals from a statewide business association that includes owners or operators of refined petroleum underground storage tanks and serves a three-year term to expire May 25, 2018.

Gould is maintenance manager in the southeast Michigan market for Speedway, LLC and served as a construction and development coordinator for new construction and remodel projects for TOTAL Petroleum, Inc. Gould earned a bachelor's degree in environmental studies from the University of Michigan – Dearborn. He represents petroleum refiners and serves a three-year term to expire May 25, 2018.

Saad is president and CEO of both Michigan Fuels, Inc. and Fuels Transportation, Inc. He serves on the National Council Advisory Board for ExxonMobil and was elected to the board of the Michigan Petroleum Association. He represents individuals from a statewide motor fuel retail association and serves a two-year term to expire May 25, 2017.

Thomassey is program director of the Tip of the Mitt Watershed Council and served as an assistant professor for the University of Minnesota Duluth. Thomassey earned a bachelor's degree, a master's degree, and a Ph.D. in political science from Northern Arizona University. She represents individuals from a statewide environmental organization and serves a one-year term to expire May 25, 2016.

Appointments are subject to the advice and consent of the Senate.

The first meeting of the new UST Authority Board is scheduled for July 7, 2015.

Article provided by Sara Pearson, CPG – MDEQ RRD Program Specialist

Drilling Demonstration at Waterloo Recreation Area

On Tuesday, August 4th together with a generous AIPG sponsor, Stock Drilling, Inc., we will host a drilling demonstration for students attending Western Michigan University's hydrogeology field camp. We are in the final stages of negotiating a lease with Waterloo Recreation Area for access to state land for this demonstration. Our proposal includes installation of one four-inch well and two two-inch observation wells. We will collect soil samples for physical laboratory testing and prepare soil boring and monitoring well installation logs.



After the wells have been installed, AIPG will provide copies of the logs to each of our university student chapters and announce that this location is available for students to use for future studies including groundwater sampling, pump testing, and gradient monitoring.

We are seeking CPGs to volunteer one day of their time to answer questions and help prepare field logs. If you are able to volunteer one full day or even a half-day of time for this event, we can ensure that the students in attendance will be provided a superior training experience. Please contact Dawn Prell (dawn_prell@golder.com or 248-214-6971) if you are able to help.

Dawn Prell, CPG – 2015 Michigan Section President

Educator Grant Recipient Thank You

Editor's Note: The following article included numerous photographs of the activities described below; the photographs were not included due to space and formatting constraints... The article and photographs are posted on the Section website on the Award Forms page.

Because I was the recipient of the 2015 AIPG Educator grant, I was able to bring many hands-on activities to my high school geology students teaching them porosity and permeability of sediments, crystal formation, igneous rock formation, and how oil is released during hydraulic fracturing.

Included in the lesson were an ESRI Storymap, "Mapping the Shale Gas Boom" and a search for wells in Michigan using DEQ data. The unit ended with a field trip to an aggregate quarry, touring an open pit mine. The plant manager, Bill Begley, explained and showed mineral processing; examples of the minerals mined there, and allowed us to collect celestine, pyrite, chert, and fossils. With the grant money, I was able to purchase assorted sediments, dry ice, tubing, mason jars, a bike pump and the equipment to make the rock pump, Jell-O, supplies for peanut brittle, 10 hand lenses, and other miscellaneous equipment, such as Epsom salts and pipe cleaners. I would not have been able to create such a rich, hands-on experience for this unit without your support. My students and I truly appreciate your generosity.

Deb Zolynsky, Lake Shore High School

Support our Sponsors!

The Section Executive Committee would like to remind its members to support the companies advertising 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. 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. 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.

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

Interesting Geology Links

The Editor has received links to various interesting geology-related sites. Some of the more interesting

links are included here. If you have any links to geology-related links that you would like to share, please forward them (with a citation, if applicable) to the Editor.

Thanks to Mark Francek of Central Michigan University for sharing via the "Earth Science Site of the Week" emails.

YouTube Videos on Archival Photographs and Video of the 1906 San Francisco Earthquake: <https://www.youtube.com/watch?v=mvve8YiYGSo>.

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 articles were received for this edition of the newsletter.

Employment Opportunities/Seeking Employment/Member Opportunities

To serve our members, and provide added value, the Michigan Section Executive Committee has decided to allow ads for employment or other 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.

Employment Opportunities

Environmental Resources Group, LLC (ERG) is a premier, fully integrated professional environmental services firm positioned to service public-and private-sector clients. ERG employees engineers, designers, planners, scientists and management and construction services professionals. The firm is a leader in all of the key markets that it serves, including transportation, facilities, environmental, energy, oil and gas, water, and government. More information on ERG and its services can be found at www.ERGrp.net. Please e-mail your resume to info@ERGrp.net.

About the Business Line

Environment

Our team of environmental specialists offers clients expertise in air quality, impact analysis and permitting, environmental health and safety management consulting/due diligence, remediation consulting/engineering and construction/site restoration, specialty and emerging technologies, waste services and water and natural resources.

Job Summary

ERG is looking for environmental professionals (entry level to up to 3 years of experience) in the Due Diligence (ASTM Phase I ESA, Phase II, BEA), Leaking Underground Storage Tank, Site Remediation Program, and assessment areas. Ideal candidates will be skilled in soil and groundwater sampling, report writing, familiar with the LUST regulations for Michigan, Ohio, Illinois, and Indiana. 40-hr/8-hr HAZWOPER is required. State asbestos building inspector/lead assessor certification is preferred.

Bachelor of Science degree in Science/Engineering. In addition, candidate should be willing to accept some travel possibly once or more a month. Have a valid Driver's license and be prepared to confirm US residency or document that he/she has the legal authority to be working in the US.

The position (based on experience) will be salary based and is negotiable. Other standard benefits such as a retirement plan, sick days, vacation days and allowances for health care are also available.

Preferred Qualifications

Advanced degree preferred.

What We Offer

ERG is a place where you can put your innovative thinking and business skills into high gear and work alongside other highly intelligent and motivated people. It's a place where you can apply your skills to some of the world's most challenging, interesting, and meaningful projects worldwide. It's a place that values the diversity of our areas of practice and our people. It's what makes ERG a great place to work and grow.

ERG is an equal opportunity employer and Minorities, Females, Veterans, and Disabled persons are encouraged to apply.

EXECUTIVE DIRECTOR SEARCH

The American Institute of Professional Geologists is recruiting candidates for Executive Director. AIPG is a 501(c) 6 professional geoscience society dedicated to advocacy, education and competence within the profession with a membership of more than 7000 and a dedicated staff of seven at its headquarters in Thornton, Colorado.

The Executive Director is responsible for headquarters operations and for maintaining excellent relationships with appropriate professional and technical societies, especially sister geoscience societies such as the American Geosciences Institute, the Geological Society of America, and the European Federation of Geologists. The Executive

Director serves at the pleasure of the AIPG national Executive Committee in promulgation of duties to advance and maintain AIPG platforms and objectives as defined in the AIPG Bylaws and Strategic Plan.

The successful candidate will:

- Hold an advanced geoscience-related degree (MS or PhD); an additional degree in marketing or business is a plus.
- Have a minimum of 15 years of successful management experience at increasing levels of responsibility.
- Have a background in fiscal management tied to annual profitability, growth, and program expansion.
- Be a team-oriented leader with strong communication and interpersonal skills, and a proven entrepreneurial record.
- Demonstrate an appreciation of policy issues affecting geoscientists and the geosciences, especially at federal and state levels.
- Demonstrate an enthusiasm for service as a professional representative of the geosciences.
- Be willing to travel as needed. The responsibilities of this position often require weekend meetings and lengthy workweeks.
- Be committed to relocating to the Denver area.

In addition to these specific qualifications, the AIPG Executive Committee expects the successful Executive Director to help propel AIPG to a higher level of involvement in the geosciences community and in increasing its services to members. The Executive Director must be entrepreneurial, dynamic, and personable and be able to commit to an aggressive campaign to increase membership and develop additional sources of non-dues revenue. The Executive Director is also expected to seek additional alliances and collaborative arrangements with other professional societies that will serve to benefit AIPG both professionally and financially.

The Executive Director is responsible to lead the continual refinement and implementation of the AIPG Strategic Plan and ensure that both AIPG leadership and AIPG membership are engaged in its implementation.

The future of all professional societies is dependent upon the younger members of the profession becoming actively involved in the governance of the societies. In recent years, AIPG has greatly increased the involvement of students and young

professionals. The successful Executive Director is expected to continue this success and vigorously engage students and younger members.

The Executive Director will report to the Executive Committee and is subject to periodic review by the Executive Director Committee. The Executive Director will also supervise the staff of AIPG and will serve as ex officio board member of the Foundation of AIPG.

Applicants are required to send: 1) a complete, detailed resume, 2) the names and addresses of at least four professional references, and 3) a concise two page essay outlining the applicant's interest and the applicant's concepts for expanding AIPG service to members, visibility, influence, and financial strength. Applications will be accepted until the position is filled. Review of qualified applications will begin immediately. Salary range between \$105,000 to \$120,000 per year. Benefits include relocation assistance, health insurance subsidy, retirement plan contributions, vacation and sick leave.

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If interested, please view the entire posting and apply online at www.consumersenergy.com, under the careers tab. This position is listed as Requisition #50787936.

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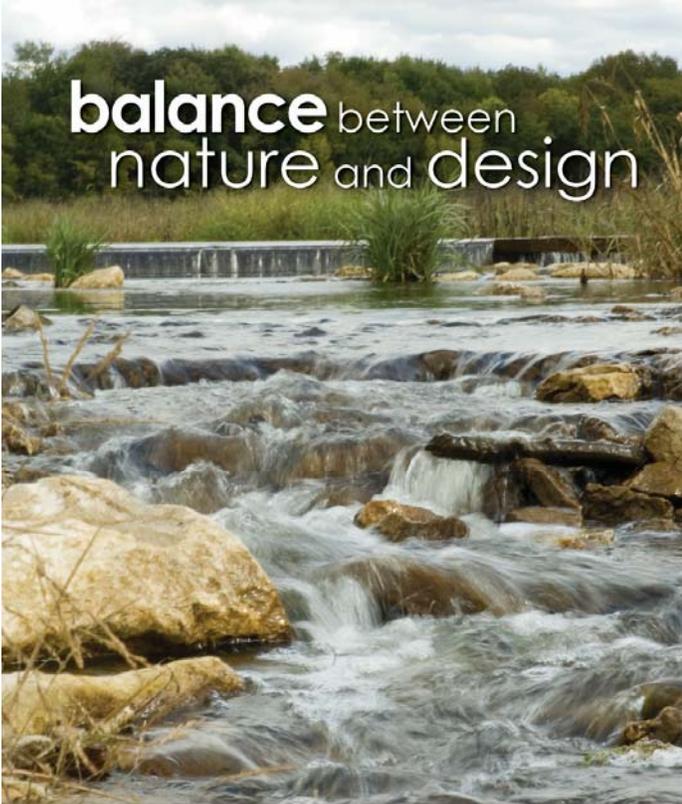
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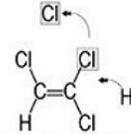
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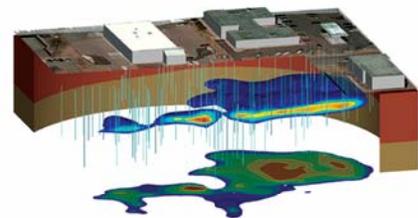
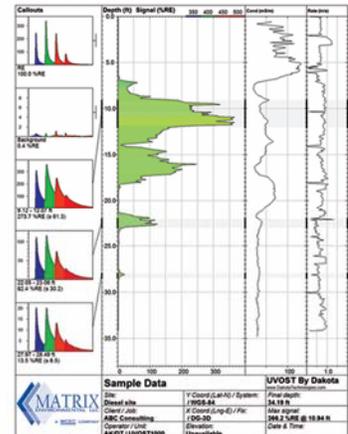
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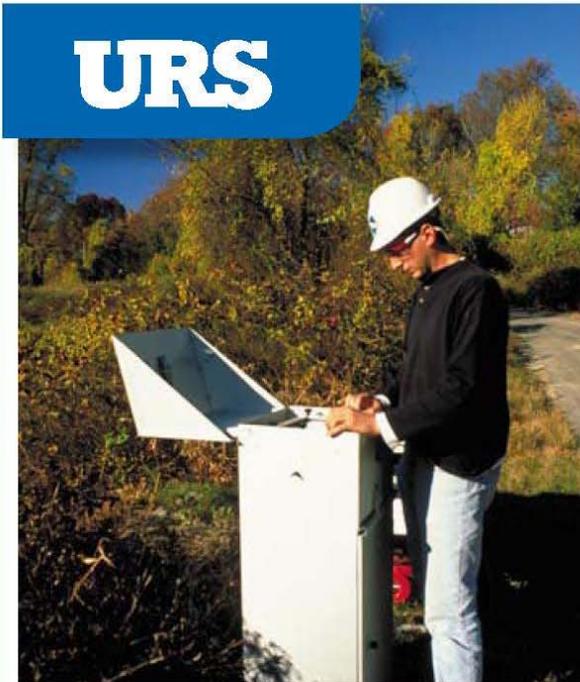


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AIPG MI Section 4th Annual Workshop GSI Characterization, Evaluation, and Compliance

Tuesday, June 17

1:00 p.m.–1:30 p.m.

A New Paradigm for GSI Pathway Compliance & Putting 10 “Options” into Perspective

Presented by: Gary Klepper and Jennifer Quigley

3:30 p.m.–4:00 p.m.

**Pore Water Characteristics as Indicators of Venting Groundwater and
Depth-Integrated Water Column Sampling (Kalamazoo River)**

Presented by: Gary Klepper and Michael Coram

Wednesday, June 18

4:00 p.m.

GSI Q&A and Viewpoints (Panel Discussion)

Presented by: Gary Klepper (CRA), Jason Lagowski (Arcadis),
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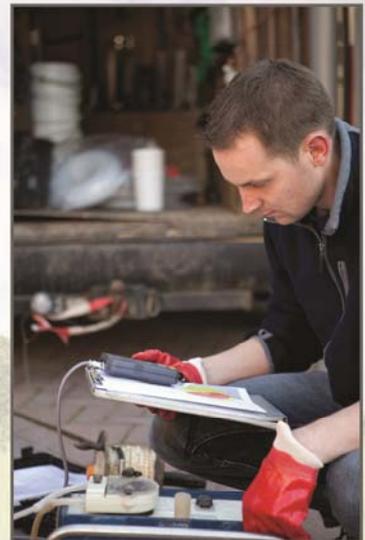


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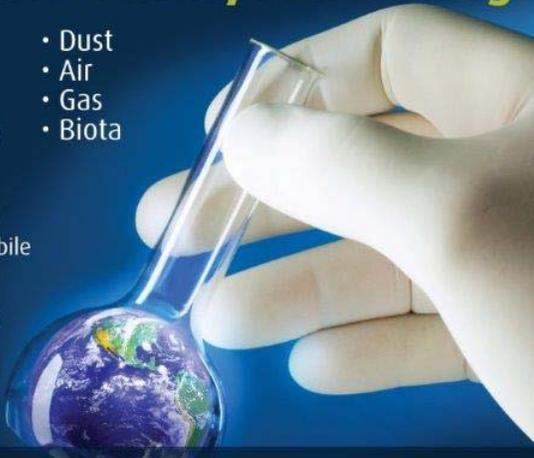
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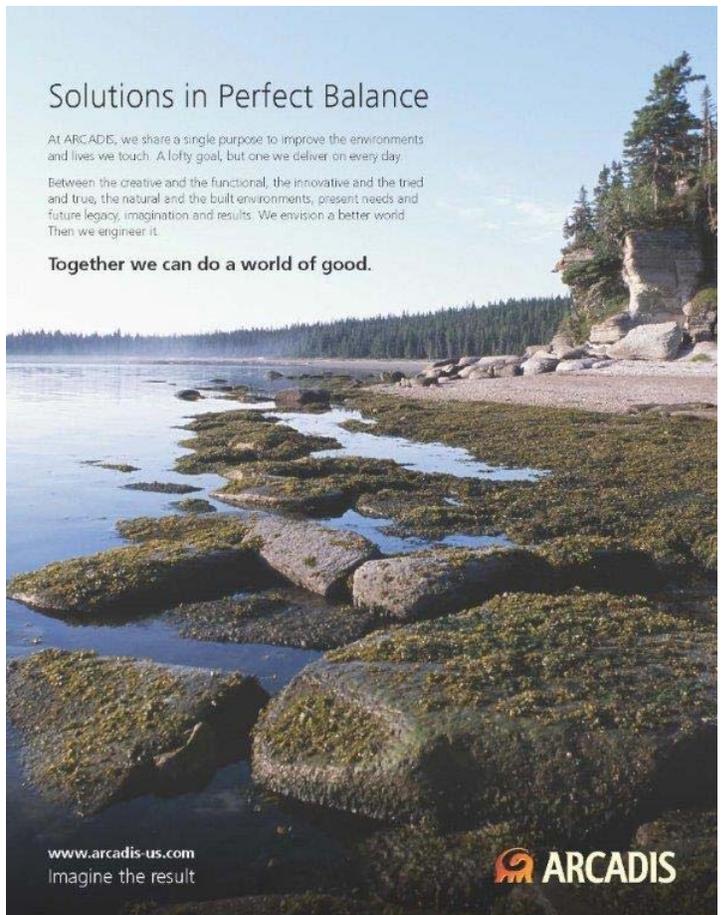
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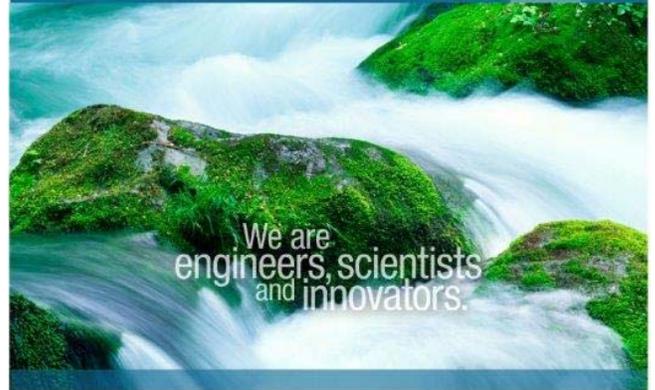
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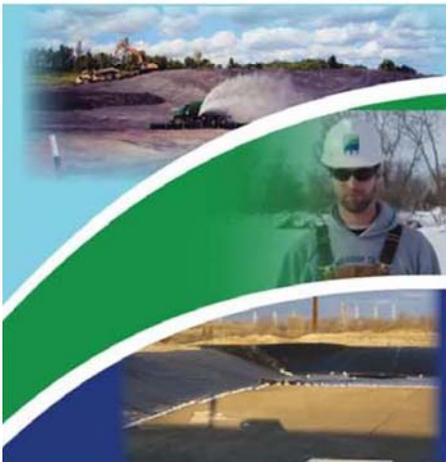
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Barr's employee- and community-focused culture has earned us repeated recognition as a "best place to work" locally and nationally. *CE News*, *Environmental Business Journal*, and *ZweigWhite* frequently name us one of the top environmental and civil engineering firms in the nation to work for. What differentiates Barr from other firms?

- positive relationships between employees and company leaders
- career coaching and mentoring
- an annual training budget for self-directed development and training for every employee
- flexibility and commitment to the importance of worklife balance
- community involvement
- a compensation structure that rewards performance, compensates every hour worked, and includes ESOP and dividends

who we are and what we do

Barr is an employee-owned firm that integrates engineering and environmental expertise to help clients develop, manage, process, and restore natural resources.

We serve the fuels, power, and mining industries, natural-resources management organizations, and other clients with complex problems. Barr makes a company-wide commitment to client service, applying the principles of exceptional service to staff and client interactions.

Barr is seeking engineers and scientists at all levels to join us in solving our clients' problems. View our current openings and apply online at www.barr.com/careers.



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