



Wisconsin Geothermal Association

**Autumn
2009
Issue**

2010 WGA Annual Meeting and Conference March 17 & 18, 2010 The Hotel Mead, Wisconsin Rapids

The board of the Wisconsin Geothermal Association is very excited to announce that the 2010 WGA Annual Meeting and Conference is moving back to Wisconsin. The conference is scheduled for March 17 & 18, 2010 at The Hotel Mead and Conference Center in Wisconsin Rapids.

For the past few years the Iowa and Wisconsin Geothermal Associations have held a joint conference with the WGA Annual Meeting being held during that conference. This year, thanks to feedback from WGA members, the Wisconsin Annual Meeting and Conference is back in Wisconsin making it in a more central location for more Wisconsin attendance. WGA thanks the Iowa Geothermal Association for working together with the Wisconsin group to hold joint conferences for the past few years. The Iowa Conference is always very informative and the WGA board encourages everyone to also attend the Iowa Conference if your schedule allows.

Some of the sessions being planned during the WGA Conference include:

- Selecting and sizing pumps
- Designing & Sizing Residential Loop Fields
- Selling Geo Systems
- Designing Commercial Systems

- Vertical Drilling & Installation Techniques
- and much more.

There will also be the WGA Annual Meeting during which there will be elections for the board and other association business. As a WGA member, it is important that you attend the Annual Meeting.

There will be more information in the Winter Edition of this publication or you can go to the WGA website, www.wisgeo.org where there will be up-to-date conference and registration information.



Lobby at The Hotel Mead



CVTC Teaches By Example With Geothermal Technology

Chippewa Valley Technical College HVAC Students and Staff Install “Green” Geothermal Heating and Cooling with assistance from WaterSource Heating & Cooling.

When higher education in Eau Claire, Wisconsin is looking for experts in geothermal heating and cooling they turned to WaterSource Heating and Cooling because of their 26 years of experience. When WaterSource looks for excellence in geothermal equipment they turn to WaterFurnace® for geothermal heat pumps.



This WaterFurnace® flow center and Envision® machine is used for heating the lab featuring the worlds first 30 EER (cooling efficiency) and 5 COP (heating efficiency) comfort system.

Jim Mortwednt of Chippewa Valley Technical College (CVTC) praised the recent Geothermal HVAC Lab upgrades. “By installing state of the art geothermal equipment for our students to learn with we attract top academic students, enhance the image of the college and help ensure graduate placement. The Heating Ventilation and Air

Conditioning (HVAC) programs are at full student capacity.” By bringing in WaterSource and Dan Green, students have a unique opportunity to learn looping installation and ground source geothermal heat pump technology from one of the most experienced experts in the nation while using real world opportunities to reduce carbon emissions and save money. By learning these geothermal installation basics students gain key techniques that will benefit the community through long lasting, robust installations. CVTC is receiving the benefit of this technology in many ways.



CVTC Greenhouse has replaced fossil fuel heating with geothermal heating.



Three 170 ft. vertical loops are brought together in what is called a header shown here with Chad Green.

Tim Mentink and Jim Bevins are senior HVAC instructors at CVTC. They identified a need in the marketplace, made a presentation to the board and received approval to install two ground source heat pumps that provide heating and cooling for the HVAC lab plus heating for the schools agriculture greenhouse. Bevins stated “Industry needs training and geothermal high COP’s (coefficient of performance) results in significant energy savings.” The system includes three 170’ vertical closed loops, one WaterFurnace Envision® water to air and one WaterFurnace water to water geothermal unit. Tim Mentink mentioned that Dan Green and WaterFurnace have been gracious with sharing equipment access and years of geothermal experience. By learning ▶



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directly from the best, staff and students become perfectionists when it comes to creating robust installations designed to last. The loop is guaranteed for 50-55 years and may last for several hundred years while the typical heat pump machine is rated for 24 years. Conventional fossil fuel ignition/combustion machines are rated for 12-14 years. Dan Green is known for referring to the closed loop as ... "It's like having an oil well in your back yard without all the mess."

Dan Green expressed his gratitude to WaterFurnace International for supporting growth of his business and producing units with the highest efficiency in the industry and CVTC for consistently producing talented graduates. Dan describes the industry's progression; starting with wood and coal, progressing to heating oil, progressing to natural gas and propane, and finally to geothermal heating and cooling by using the earth's relatively constant temperature.

To find out more visit these websites:

Water Source Heating and Cooling

www.watersourcegeothermal.com

WaterFurnace International~www.waterfurnace.com

Chippewa Valley Technical College~www.cvtc.edu ■



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Troy Van De Yacht
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support@vdydrilling.com
www.vdydrilling.com



Calendar of Events

October 28, 2009

The Right Way to Go Geo: Residential and Commercial Buildings Eau Claire, WI

December 1, 2009

The Right Way to Go Geo: Residential and Commercial Buildings Madison, WI

March 17 & 18, 2010

WI Geothermal Association Annual Meeting, Wisconsin Rapids

Focus on Energy Geothermal Rebates

Ground Source/Geothermal Heat Pumps

Reward amount \$250

- * COP 3.3 or greater for a closed loop system.
- * COP 3.6 or greater for an open loop system.
- * 15 EER or greater.
- * Air handler must have an ECM.
- * Heat pump must have at least two stages of heat output; there can be no electric back-up heat with the system; including plenum heaters and baseboard heat.

Customer must purchase electricity from a participating utility to qualify for this reward.





Wisconsin Geothermal Association
455 Science Drive, Suite 200
Madison WI 53711

Advertise on www.wisgeo.org

The Wisconsin Geothermal Association is now placing advertising space for members on its website. The advertising will consist of two parts: 1) a small ad on the margin of the front page (rotating with other ads), and 2) a larger ¼ page ad on a separate ‘sponsor’ page. The additional advertising will be a great way to promote your business, and support the WGA beyond the membership level. The ads will link directly from the WGA homepage to the website of your choice.

Payment

To sign up for advertising, please mail a check (sorry, no credit cards) with this form, to the **WGA, 455 Science Drive, Suite 200, Madison, WI 53711**. The *annual* cost is **\$250 contractors/loopers/designers and \$500 for manufacturers/distributors**. Renewal of advertising will occur when you renew your membership.

Name: _____

Organization name: _____

Date: _____ Months until membership renewal: _____

Web address (to link from ad): _____
(if different than that provided at membership)

If your membership renewal is less than 10 months away, please pro-rate the amount of your check for the number of months left until renewal (example: 7 months away – cost = $\$250 \times 7/12 = \146). Email info@wisgeo.org to inquire about your next renewal date.

Ad Images

Images should be emailed to info@wisgeo.org in .JPG format.

Front page image:

Maximum display size: 2" wide by 2" high

Images larger than the maximum display size will be re-sized accordingly.

Sponsor page ad:

Maximum display size: roughly 4" x 4.5"

400 x 450 pixels