



## MultiGEO™ Design and Control Software Reinforces U.S. Army's Fort Benning

### System Benefits

- *Optimizes geothermal system performance to reduce pumping energy and overall system energy consumption*
- *Determines capacity of the geothermal system relative to heating/cooling loads of the barracks*
- *Analyzes existing heating/cooling loads and geothermal capacity to determine how many additional buildings can be added to the system*

In late 2013 the U.S. Army at Fort Benning in Georgia initiated a two-year renovation project of two 300,000 sq. ft. barracks. The project included adding a new ground-source geothermal heating and cooling system that could be most efficiently and effectively used with the renovated HVAC system. The new geothermal system includes five individual bore fields with 558 bores, each 400 feet deep.

Advanced, intelligent MultiGEO™ design and control software from Multistack and developed by Greensleeves, tracks, stores and analyzes the heat flux to/from each of the five ground source bore fields and the two barracks buildings. Based on this tracked historical information, the MultiGEO system software predicts future ground source heat exchanger system conditions in order to determine the “health” of the system.

The MultiGEO software optimizes the performance of all five bore fields to reduce pumping energy and overall system energy consumption while optimizing system performance. This technology will also determine the capacity of the geothermal system relative to the building loads and performance of the existing barracks while allowing for further analysis to determine how many additional buildings can be added to the system without increasing capacity via a hybrid approach.

The total potential expansion of the campus loop is anticipated to include seven identical buildings, bringing the project to over 2 million square feet on the geothermal system.



Multistack is the exclusive licensee of the Greensleeves design and operational software for unitary and centralized geothermal systems. It is sold under the trade name “MultiGEO.” Contact your nearest Multistack representative for more information on this revolutionary product that makes the energy savings of geothermal systems available to building owners who previously could not overcome the initial cost of a bore field.



# Originators. Innovators. Never the Imitators.<sup>SM</sup>

## Originators...

Multistack invented the modular water chiller. It started with a radically simple idea: chiller modules that could be brought into the equipment room one at a time, through standard doorways and down elevators, to form a fully integrated chiller system. The idea launched a revolution and transformed Multistack into a leader in the commercial water-chiller industry.

## Innovators...

Multistack perfected the modular chiller and leads the industry in innovative and environmentally friendly modular solutions. Since founding in the late 1980s, Multistack has engineered, manufactured, and distributed an impressive array of modular air conditioning firsts: the first on-board strainer, the first modular automatic blow-down device, the first modular chiller for variable flow, the first modular chiller-heater (heat pump), the first modular heat-recovery chiller, the first modular air-to-water heat pump, the first modular chiller to utilize MagLev™ compressor technology, and the first modular chiller to utilize R-410A.

## Never the Imitators...

Multistack sets the standard in the industry for superior customer service, fast and on time shipment, superior product quality, and new product development. Our pioneering leadership in environmental issues is well documented. If you want the best, be sure to specify the original – Multistack®.



**MULTISTACK**

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