

## What is a GEOCLIP?

A GEOCLIP is a u-bend pipe separator designed to enhance vertical heat exchanger performance by ensuring consistent, optimum placement within the borehole.

## How do GEOCLIPS work?

GEOCLIPS provide maximum separation of the two VHE pipes from each other and force them against the sides of the borehole. This maximizes the exposure to the earth for heat transfer, eliminates the insulating effects of bentonite-based grouts, and ensures consistent placement of the pipes throughout the borehole.

## What are the benefits of using GEOCLIPS on a geothermal installation?

The use of GEOCLIPS can improve the efficiency (heat transfer) of the installation by 20% – 35% for optimal performance and reduced energy costs making the most of the geothermal investment.

## Why should I use GEOCLIPS ?

The increased efficiency GEOCLIPS provide can allow for shortened required VHE lengths and reduce the need for thermally enhanced grouts therefore decreasing installation costs.

## Is it cheaper to add GEOCLIPs and eliminate borehole depth?

Yes, the cost of additional borehole length far exceeds the cost of GEOCLIPS.

## Will the benefit of GEOCLIPS be greater if they are placed closer than 10'?

There is a negligible gain for placing additional GEOCLIPS; 10 ft. has proven to be the optimal distance for performance.

## Is the spring tension on the GEOCLIP strong enough to force the pipes within the borehole once there's grout around it?

Yes, the force of the GEOCLIP was designed for the recommended pipe sizes within a maximum recommended borehole diameter of 8".

## Doesn't it take more time to install using GEOCLIPS?

It takes about 10 seconds per GEOCLIP. So on a 200 ft. borehole, it would add an average of 3 minutes conservatively. Keep in mind for each GEOCLIP you can eliminate 50 lbs. of thermally enhanced silica sand.

## What are the minimum required borehole diameters?

For specific information reference the GEOCLIP Required Borehole Diameter Chart.

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