



## Homeowners Enjoy Clean, Quiet Comfort of Geothermal Heating, Cooling and Domestic Hot Water



When you build a spectacular home, you take time to choose the location, style of the building, internal furnishings and everything to ensure your comfort. Within these post and beam rooms a forced air system was chosen to best match it's heating and cooling needs. Then to minimize operating costs while maximizing their comfort, these homeowners installed a safe, clean and energy efficient Geothermal system.

A Geothermal system has two main components, the **heat-pump** and a **heat-reservoir**. The geothermal **heat-pump** (in this home a reliable WaterFurnace unit was selected), uses similar technology to that of a home



refrigerator to exchange heat energy between the home's interior and the **heat-reservoir**. Bringing heat energy inside during the winter and taking heat energy out of the home in the summer. There is no combustion, so no chance of carbon monoxide emission and only the whisper quiet air circulation pump when operating.



This home's **heat-reservoir** is a beautifully landscaped pond that naturally collects and stores the sun's heat energy throughout the year. Pipes are run below ground from the home to the pond in which the heat exchange loop-coils are submerged. In this installation the loop-coils are closed, only heat energy is exchanged with the pond, which ensures a long lifespan and low ownership costs.

This Geothermal system, together with a Heat Recovery Ventilator to regularly refresh inside air, maintains the desired quality, quiet comfort and low operating costs these energy-smart homeowners desired.

L: Energy Smart Homeowner, R: Bill VanHee



Heat Recovery Ventilator

WaterFurnace Geothermal Unit