

## **Our Experience with Geothermal Heating/Cooling**

In March of 2004, we moved into a 4800 sq. ft. house, which had been built in 2001. The house was heated with forced-air propane and cooled with an electric air conditioner. The energy costs in 2005, our first full year in residence, was \$1376.00 for hydro and \$3515.00 for propane; a total of \$4891.00. In 2006, we were informed that our contracted rate for propane would increase from 60.2 cents per litre to 64 cents per litre. We had a geothermal system installed by Waterloo Energy Products in July of 2006. For 2007, the first full year of our geothermal use, the hydro cost was \$3804, which gave us heating and cooling. This represented over a \$1000 savings based on 2004 propane prices. For the next few years we noticed that our annual hydro costs were decreasing, despite some Hydro One rate increases. It was explained to us that the soil backfilled over the lines would be full of air, which is a poor conductor, and that it would take 7 years for the soil to pack back down and the geothermal system to work at its maximum efficiency.

In the ensuing years propane costs skyrocketed and at one point hit \$1.20 per litre. If we had remained on propane, that would have represented over \$7000 in fossil fuel costs per year. Our average cost for hydro for the past few years has been \$2760!

Additionally, we have a secondary 1800 sq. ft. building on the property, built in the 1970s, which historically had been a veterinary clinic. We converted it to a karate school. The first year the hydro costs were \$1800 and the propane costs were just over \$3000. It had no cooling system. Waterloo Energy installed a geothermal system in the building and we did some energy efficiency upgrades. Our average annual hydro costs since have been \$1250. The house and karate school geothermal units have been in operation 16 years. They have required zero maintenance, aside from the periodic filter cleaning.

There are so many advantages, besides the incredible monetary savings, associated with geothermal heating and cooling. They are energy efficient to operate. They are environmentally sound, since there is no fossil fuel usage or combustion emissions and they are safer than conventional furnaces, in that there is no risk from carbon monoxide.

Our experience with Waterloo Energy Products from the very beginning has been incredible. At every step of the installation in 2006, we were informed as to what was happening. The workers were polite and careful and always ready to answer our many questions. There was immediate and periodic follow up after installation to see if we had any concerns or questions. Recently, we began a major renovation of the karate school, and needed the geothermal lines rerouted on a very tight schedule. They rescheduled other work and sent a crew exactly when the work needed to be done. Waterloo Energy Products has truly proven to be a customer-focused company.

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