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Sonic Wins

Spotlight



## Sonic Wins "Best New Drilling Technology" Award



The parent company of Sonic Drilling Ltd. -- the Sonic Drill Corporation -- has won a national competition for the 'best new drilling technology.'

The competition, hosted by the Canadian GeoExchange Coalition, examined a variety of geothermal drilling technologies.

In particular, the competition solicited entries for technologies that could accomplish small diameter borehole drilling as affordably as possible and more quickly and cleanly. The jury for

this competition consisted of geoexchange industry stakeholders, technology commercialization specialists and researchers.

The \$10,000 top prize was awarded to the Sonic Drill Corporation, based on its submission, which was judged on the following criteria:

1. Ability to drive a 4.5 in. diameter x 400 ft. deep borehole in less than 10 hours;

2. Ability to drive boreholes as quickly as possible;

3. Ability to safely drill in all conditions including rock, sand, and through aquifers;

4. Minimal mobilization and de-mobilization time;

5. Minimal damage/cleanup when working in mature subdivision lots that are fully landscaped.

Prior to winning this award, Sonic Drill Corp.-manufactured rigs had already distinguished themselves by offering unparalled performance in overburden soil conditions. Without a doubt, these factors played a significant role in winning the Canadian GeoExchange Coalition award.

## **Geothermal Project Spotlight**

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Recently, Sonic Drilling Ltd. was contracted to install four geothermal holes and loops for an older heritage-style home. The home was located on a difficult slope, with tight consolidated material underneath and in the middle of Kitsilano, a popular but congested urban neighbourhood in Vancouver, BC.

"It was a challenging job site where, instead of using water, we drilled with compressed air...it took a little longer than our standard two days but we got it done," says Bill Fitzgerald, general manager.

"Now, this home can be renovated and retrofitted above ground to match the new system it has below ground – a credit to the homeowner who wasn't discouraged at putting geothermal into an older home."

While it's entirely feasible to install a geoexchange system in a smaller, older home, most believe that residential geothermal installations are best suited for new houses larger than 3,000 sq. ft. – a notion that not everyone agrees with.

"A lot of people actually tried to talk us out of installing geothermal in our new home because it is only 2,500 sq. ft," says Jennifer Magee, who, along with husband Bradley, is the proud owner of a new home in Langley, BC.

"Because our home is smaller, it will take awhile before the system is paid for but it's still the best thing we ever did," she says.

With a small working space and silty, sandy ground beneath them, the Magees arranged for a sonic drill rig to bore four holes, each to a depth of 200 ft.

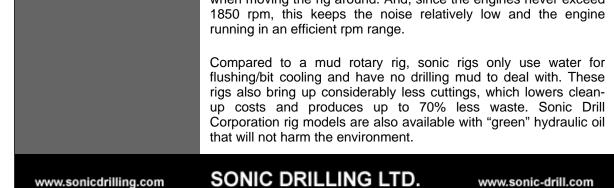
As it turned out, the sonic drill rig was only on the Magee property for one day due to its ability to drill 3-5X faster than other methods, even in overburden conditions.

Today, the Magees continue to enjoy the savings from their geothermal energy source and have calculated that they spend no more than \$100 per month on all utilities.



If you compare a sonic rig to a conventional air rotary rig, you'll notice a big difference that makes this technology both "green" and cost-effective. Sonic rigs use approximately 50% less horsepower while still drilling holes significantly faster. This means that fuel consumption, on a hole to hole basis, is considerably less using a sonic rig.

The 250-hp Cat engines, used by the sonic rigs, are also physically smaller and lighter, further reducing fuel consumption when moving the rig around. And, since the engines never exceed



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