

NEWS RELEASE

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Sonic drilling technology a proud homegrown BC export

Surrey, BC – Award-winning, patented sonic drilling technology, in use on six continents and in every application imaginable, is a proud export of Surrey, British Columbia.

More than 30 years ago, Sonic Drilling Ltd. was first established in Surrey to test out Canadian engineer Ray Roussy's newly patented sonic drilling technology. Roussy, who holds dozens of patents, is solely responsible for the successful commercialization of sonic drilling technology when others failed to make it work.

Today, Roussy's sonic technology has won four awards and grown into an international export that supplies Surrey jobs as well as advanced technology to countries around the world. As proof of its success, here's a small sampling of where some of Roussy's BC-made drill heads are now and what they're working on:

- Diamond exploration in Africa
- Expanding an underground subway in New York, USA
- Revealing glacial secrets in Alberta
- Searching for gold in Yanacocha, Peru
- Drilling for bauxite in Guyana, South America
- Geothermal drilling for an American school in Chofu, Japan
- Platinum mining at the Kondyor Mine in Russia
- Helping to rebuild after the tsunami at Sendai, Japan
- Mineral exploration in Chile
- Drilling offshore of New Zealand from a WWII landing craft
- Installing a road pavement melting system in Japan
- Unlocking gas deposits in the Arctic
- Rehabilitating nuclear waste sites in the USA
- Drilling in the difficult silica-laden Mississippi area, USA



Closer to home, Roussy's drilling technology has been used on numerous projects throughout the Lower Mainland as well as further afield.

"We've taken these rigs on the road as far north as the arctic, across Canada and into the US, depending on client requests. We've even barged rigs into more remote locations," says Roussy, president of Sonic Drilling Ltd. and the Sonic Drill Corporation.

In fact, companies on the Lower Mainland have embraced Roussy's fleet of sonic drill rigs and used them on a number of projects including:

- Surrey Woodward Hill School
- Skytrain Evergreen Line
- UBC library extension
- Langara Community College
- Langley Municipal Building
- New Westminster *Dominion* Complex
- Vancouver Tunnel

More recently, sonic rigs worked on a downtown Tsawwassen complex called Northgate which is a mixed-use development including character townhomes, offices and a seniors' community.

The project includes a number of environmental innovations including a rainwater reclamation system, various energy-efficiencies, a green roof on the office building and community gardens.



On this project, sonic drilling technology was used as a rescue rig (something that happens a lot) for the condo complex's geothermal installation. In this situation, a competitor's rig had only managed to drill 1.5 holes in three weeks due to ground conditions. Once Sonic Drilling Ltd. was on site, its sonic rig was able to drill 25 holes, each to a depth of 200 ft., all in just 10 days. Plus, the rig is able to install the geothermal loops and then grout – all in one operation – which no other technology can do.

Compared to other forms, sonic drilling provides a number of substantial advantages through its incredible speed (at 3-5x faster, it's the fastest drill on the planet) as well as its ability to core easily through mixed soils without jamming up or requiring a rig switch out. In the Lower Mainland, this provides a distinct advantage due to the presence of sandy soils that often bog down other rigs and delay projects.

In addition, only a sonic drill can recover a continuous core sample including boulders, clays, silt, sand and gravel and lay it in its stratigraphic sequence – from the surface all the way down to 300 ft. (100 m) and beyond.