



May 6, 2016

Borealis Geopower & Queen's Team Success Story for 2015/2016

Borealis Geopower was very pleased to work with our "Queen's Team" in 2015/2016 and our team came to Kingston in mid-April 2016 for the group to present their findings. The Team included a great mix of very bright students from Queen's University which recently completed a design project investigating the use of geothermal heat resources in oilfield applications. The students were part of a unique program at Queen's University in Kingston, Ontario called Technology, Engineering and Management (TEAM). It's a fourth-year, industry-based, multi-disciplinary design course, where students are tasked with solving "real-world" engineering challenges. FNO team members involved: Taylor Skingle, Laura McKeown, Stephen Martin, Caitlyn Lahonen

The purpose of this project is to develop a heat extraction system that maximizes heat recovery from a geothermal source and delivers that energy to a specific application. The study specifically looked at implementing such a system to remove heat from water-producing oil wells and deliver that heat to an on-site greenhouse to grow various plants year-round. The project also aims to analyze the economics of this energy delivery system and compare it with other sources of energy. The economic analysis helped determine the feasibility of implementing such a geothermal heat recovery system in Canada.

A number of students had some work experience outside of university, however we found that the group were very eager to be part of 'real-world' project designs. The project involved all the intricacies and uncertainties that come with complex project development, where problems don't necessarily have a single, straightforward answer. Our experience with the Queen's Team project has shown us that is an incredible program that helps develop well-rounded and experienced future leaders of industry.

For more information on the geothermal energy solutions proposed by the student group, please contact Craig Dunn.

If you are interested in working on a future TEAM project with Queen's University, or for more information on the program, you can contact the TEAM course coordinator, Dave Mody at david.mody@queensu.ca or visit the TEAM website (<http://team.appsci.queensu.ca>).

Sincerely,

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