# One of the “most promising” graphite companies in North America

Great Lakes Graphite (‘Great Lakes’, TSXV: GLK) is rapidly emerging as one of the most promising graphite companies in North America. Great Lakes’ management has invested at the better part of a decade in studying the graphite market to determine what customers need in order to understand what makes a great deposit. Accordingly, Great Lakes has chosen a great deposit that will be able to supply an immense amount of flake graphite to North American customers as well as the area right around the Great Lakes.

Great Lakes acquired its Lochaber property in southeastern Quebec last March. It has a historical record from previous explorers but Great Lakes has moved very fast to determine the type of resource while also talking to potential end users in the area to establish a ready market base for their flake graphite. The estimates are very promising and Great Lakes will offer a high-grade product as early as 2017. One of the reasons for this speed is that Great Lakes can avoid many of the issues that complicate matters for traditional mining companies especially when it comes to spending great sums of money year after year simply to define a resource. Great Lakes is developing three different aspects of the business simultaneously including sampling with prospective customers, resource calculation and financing in order to achieve the ambitious production targets.

On November 6, Great Lakes announced an update on flotation concentration tests based on a composite sample from the Lochaber property. The goal was to determine a flotation concentration flow-sheet that would maintain the graphite’s crystalline structure and particle size to preserve the high

purity and market value of the graphite. Unlike many graphite companies, Great Lakes used a “modified infrared (IR) method (using a LECO furnace and infrared detector) assay method for our graphitic carbon assays….in order to achieve a high level of accuracy.” The graphite sample is ‘stripped’ of all non-graphitic carbon impurities such as organic contaminants and carbonate before being heated to produce an oxygen stream leaving a trail of carbon dioxide that is then examined by an infrared detector, which quantifies it allowing for the percentage of graphitic carbon to be calculated.

This is more accurate than the more common  Loss on Ignition (LOI) tests – in various forms – whereby a graphite sample is ‘roasted’ to temperatures above 1,000 degrees Celsius to remove all carbon with the resulting mass reported as graphite. The problem is that the mass would still contain debris that would lead to excessive errors. Clearly, Great Lakes has gone to great lengths in ensuring as accurate a methodology as possible to ensure the highest possible quality. The results were very encouraging given a 57.64% concentration rate for Large, Jumbo and Super Jumbo flakes. Moreover, as noted by the CEO Paul Gorman, “test results confirm that a high-purity concentrate can be easily produced from the graphite at Lochaber,” suggesting that Lochaber’s resource presents very high quality mineralization and it will be reflected in the forthcoming NI 43-101-compliant resource estimate, already at an advanced stage off preparation ahead of the Feasibility Study.

Great Lakes is moving aggressively and it has set some important targets for the next few months with the resource estimate being the immediate priority. The Company wants to move fast enough to overtake its peers to become the first producer of graphite in North America. Great Lakes has talked to end users around the world to determine how to meet a variety of customers’ specifications, working closely with end users to understand their requirements for grade, purity and

product characteristics.