

PyroGenesis Announces Contract for Second Phase Lab Scale Testing Program Totalling CAN\$170,000 with HPQ Silicon Resources Inc.

MONTREAL, QUEBEC--(Marketwired – May 4, 2017) - PyroGenesis Canada Inc. (http://pyrogenesis.com) (TSX-V: PYR) (OTCQB: PYRNF), a high-tech company (the "Company" or "PyroGenesis") that designs, develops, manufactures and commercializes plasma waste-to-energy systems and plasma torch products, is pleased to announce today that it has signed a contract for CAN\$170,000 with HPQ Silicon Resources Inc. ("HPQ"), wherein PyroGenesis will provide a second phase of Process Characterization Testing (the "Testing"), using a newly upgraded version of the lab scale PUREVAP™ Quartz Reduction Reactor (the "Reactor").

The purpose of the Testing is to build upon the bench scale success made to date and to push the design of the lab scale Reactor to a point that will allow it to operate in a semi-batch mode to produce silicon (Si) samples. The Testing will use higher purity feedstock (99.5% SiO₂) with a goal of producing at least 5N (99.999% Si) Solar Grade Silicon Metal at lab scale.

This Testing program will take place over the next several months, and will be in conjunction with the delivery of the pilot plant Reactor scheduled for October 2017. The objectives of these metallurgical tests will be, amongst others, to: (i) generate and collect data that can be used for the scale-up of the lab scale Reactor and ultimately, for the commercial scale-up of the PUREVAP™ process; and (ii) to continue testing different purification alternatives.

PyroGenesis will provide HPQ with samples for third party independent purity validation as well as a milestones report and final report summarizing the results and analysis.

"We are eager to start this additional testing phase," said Pierre Carabin, Chief Technology Officer of PyroGenesis. "This new testing will allow us to validate the design of pilot plant Reactor and to further improve the product purity."

"The further we proceed in this project, the more confident we are that we have found a plasma-based application that can be applied to quartz in a commercial setting," said P. Peter Pascali, President and CEO of PyroGenesis. "We are very pleased with the results to date. That is not to say we have succeeded, will succeed, or that there won't be challenges ahead. To the contrary, we fully expect there will be challenges as in any project; however we are certain that we will meet those challenges as we have with other projects, and find the best possible solution, if any. Once again, we are extremely pleased with the success of the project to date and the results that we have achieved."

About PyroGenesis Canada Inc.

PyroGenesis Canada Inc. is the world leader in the design, development, manufacture and commercialization of advanced plasma processes. PyroGenesis provides engineering and manufacturing expertise, cutting-edge contract research, as well as turnkey process equipment packages to the defense, metallurgical, mining, additive manufacturing (3D printing), oil & gas, and environmental industries. With a team of experienced engineers, scientists and technicians working out of our Montreal office and our 3,800 m2 manufacturing facility, PyroGenesis maintains its competitive advantage by remaining at the forefront of technology development and commercialization. Its core competencies allow PyroGenesis to lead the way in providing innovative plasma torches, plasma waste processes, high-temperature metallurgical processes, and engineering services to the global marketplace. Its operations are ISO 9001:2008 certified, and have been ISO certified since 1997. PyroGenesis is a publicly-traded Canadian company on the TSX Venture Exchange (Ticker Symbol: PYR) and on the OTCQB Marketplace (Ticker Symbol: PYRNF). For more information, please visit www.pyrogenesis.com

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