



**PyroGenesis Provides 2nd Progress Report to HPQ Silicon Resources Inc.;
62% Increase in Impurity Removal; 531% Yield Increase.**

MONTREAL, QUEBEC--(Marketwired – May 16, 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, further to its press release dated January 26, 2017, it has submitted a progress report to HPQ Silicon Resources Inc. (“HPQ”) entitled “*Update on the PUREVAP™ Process Characterization Testing #2*”, which covers the period since the last technical report. The salient points of the report are significant in that they validate the systematic and methodical approach to the lab scale test purification work, and the scaling up of the process to convert quartz into high purity silicon metal.

The report confirms that recent, and ongoing, modifications to the PUREVAP™ process have resulted in: (i) a 62% improvement in the impurity removal capacity of the system using low purity quartz as feedstock and (ii) a 531% increase in yield of the silicon (Si) produced.

“We are pleased with the progress to date,” said Pierre Carabin, Chief Technology Officer of PyroGenesis. “We have now reached a stage where we can start testing using high purity feedstock which will allow us to validate the impurity removal capacity of the lab scale reactor and ultimately, to further improve the product purity.”

Having successfully secured access to high purity quartz (99.5% SiO₂), the next phase will apply high efficiency impurity removal techniques to this higher purity feedstock. The objective of using a higher purity feedstock is to test the ability to reach the 5N (99.999%) benchmark at lab scale, and furthermore, to provide additional data which will help PyroGenesis with the final design of the pilot plant reactor. These tests will commence as soon as the latest process improvements are completed.

“These results demonstrate that the PUREVAP™ QRR quartz purification process can continue to be successfully improved while using low purity feedstock at the bench scale. This represents yet more important technical milestones being reached in our path toward production of Solar Grade Silicon Metal. At this stage of our development, we continue to pass critical milestones consistently and must continue our ‘iterative’ approach of incrementally increasing size, and purity step by step”, said Bernard Tourillon, Chairman and CEO of HPQ. “Building on our scaling up success to date, the coming months should allow us to continue to make improvements to our scaling up program, while simultaneously testing for the best and greenest pathway to

produce 5N (99.999% Si) Solar Grade Silicon Metal at lab scale, prior to start-up of the Pilot plant scheduled for 2018.”

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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