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## Itronics Reports 2016 First Quarter Total Revenues and Updates Operations Expansion and Diversification Progress

RENO, NV--(Marketwired - April 19, 2016) - Itronics Inc. (OTC PINK: ITRO), a diversified fertilizer and silver producing green technology Company, today announced sales results and summarized its operations and diversification progress for the three months ended March 31, 2016. Due to heavy rains in the California market throughout the first quarter, farmers were unable to plant their crops and did not purchase fertilizer. "This is a blessing even though the crops are delayed, the water is badly needed and soon enough the planting will begin," said Dr. John Whitney, Itronics President. California is the main market for Itronics' fertilizer sales.

Total first quarter sales decreased 30 percent on a 30 percent decrease in fertilizer sales, an 8 percent increase in silver sales and a 15 percent increase in photo services sales.

Total Revenues for the three months ended March 31, 2016 were \$373,000 compared to \$530,000 in the same period in 2015. Silver sales, the silver stripped from the wastes used to manufacture the fertilizers, increased eight percent. Photo Services increased 15 percent due to a 39 percent increase in spent silver-bearing photo liquids being received. Silver content of those liquids increased by 57 percent and is now in the unprocessed photo liquid inventory for future recovery.

2016 First Quarter Sales Results

Inaudited Revenues for the first	quarter ended March 31, 2016	together with com	parative unaudited figu	ires for the 2015 first o	juarter are presented below

# **Operational Developments**

One of the Company's fundamental strengths is its ability to invent, build, and operate green "zero waste" technology to completely convert certain categories of hazardous waste materials into cash through the production and sale of commercial goods. The Company is using this creative ability to diversify its operations by developing a portfolio of core "zero waste" technology extensions to establish year-round non-seasonal sales in new market segments. Completely converting hazardous photographic waste to GOLD'n GRO fertilizers, silver, and silver-bearing glass maximizes sustainability and makes the environment cleaner.

GOLD'n GRO fertilizers. Two new field applications for one of the GOLD'n GRO multi-nutrient fertilizers are being introduced by our distributor this year. Initial sales for these new applications in 2015 produced a six percent increase in fertilizer volume sold in the twelve months and is expected to continue increasing in 2016

The Company has identified a potential new environmental benefit that may be obtained by using GOLD'n GRO fertilizers. Based on experience obtained from the manufacturing process and from the leaching research and development work, the Company has observed that the non-nutrient metals cadmium, lead, and mercury are not soluble in our fertilizers. Work with KAM-Thio has demonstrated cadmium, lead, and mercury can be removed from solutions treated with KAM-Thio. Vegetable growers have a need to minimize uptake of cadmium by vegetable crops. The Company's distributor is performing field tests in 2016 to evaluate whether use of GOLD'n GRO fertilizers on vegetable crops may be able to reduce cadmium uptake from the soil by these crops.

Over time, cadmium levels have increased in some soils, leading to increases in cadmium uptake by crops. Cadmium has no known nutritional value to humans or plants and it is known to be a health hazard for humans. Minimizing cadmium uptake by vegetables and field crops is desirable to minimize its presence in the human diet.

Silver Production. The Company's new energy saving silver refining system was on stand-by during the first quarter while more feed material was being prepared for refining. The Company is preparing to conduct its next refining campaign which will include incorporating ground up circuit board scrap (e-waste) to develop quantitative data that can be used to evaluate the feasibility of the Company's technology for refining e-scrap to recover its copper, silver, gold, palladium, and possibly tin.

In the fourth quarter the Company acquired and installed a new jaw crusher for crushing glass produced by the refining furnaces. The Company also installed a screening machine that sizes the crushed glass so that it can be sold to a smelter. These machines were tested operationally during the first quarter. The glass has a small amount of silver in it and so sale of this glass for its silver content will produce a third category of revenue for the Company: "Silver-bearing Glass". Itronics has an inventory of this glass which is being crushed and screened in the first half of 2016 for sale during the second half of the year. Once continuous refining is re-started, silver-bearing glass production will be on-going.

The FeLix, SuLix leaching technology pilot operation is being prepared for a five times scale up so that a larger quantity of leached solids can be passed to the refinery for silver separation and purification. About 75 percent, or about 75 pounds out of each 100 pounds, of the feed material to the leaching process is now being recovered in a liquid form that can be incorporated as raw material in the manufacture of the GOLD'n GRO fertilizers. All of the silver in the leach process feed materials is contained in the silver concentrates that are delivered to the refinery.

During the quarter engineering drawings for the new leach tank were completed and tank construction by an outside contractor was authorized. Electrical work needed to support the expanded pilot plant is now being performed by electrical consultants and subcontractors. During the quarter a small prototype solids dryer was assembled and is now being tested. The dryer is a special design made specifically to accommodate the characteristics of the leached solids for refining. Also during the quarter assembly of a prototype vapor scrubber was begun and is being tested. Liquids produced by the recovered vapor will be used in the photochemical processing operation. A prototype vapor scrubber for the scaled up leaching tank will be assembled during the second quarter.

The new leaching technology has improved the productivity of the refining furnaces by approximately 10 times. This improvement in furnace productivity created a shortage of leached solids feed (silver concentrates) for the furnaces. The Company's project to scale up the leaching process will produce a larger quantity of silver concentrate to be passed to the refinery for silver separation and purification.

The Company has been processing silver-bearing photographic liquids and accumulating the silver-bearing solids since December 2013 and there is a back log of silver-bearing material available for leaching and transfer to the refinery. Small scale leaching was continued during the quarter and has produced enough silver-bearing solids to support a refining campaign during the second quarter. Improvements are being made to the photo liquid processing operation to increase the amount of silver-bearing solids production for the expanded pilot scale leaching operation. The new leach reactor system and facility improvements are now expected to be operational by the end of the second quarter.

E-scrap processing feasibility study. In the second quarter of 2015, Itronics announced that it had started a feasibility study to determine whether e-scrap (computer circuit boards) processing can be integrated into the new refining operation. The Company has mounted a shredder on a portable base, installed the necessary electrical connections, and tested the shredder for suitability for shredding e-scrap to be used as feed to the refining furnaces. The Company has determined how much e-scrap can be introduced into each refining melt.

In October 2015 the Company acquired two grinders that will be used to reduce the shredded e-scrap to a fine powder in two stages in order to improve the ability of the production furnaces to process the material. The grinders are being installed and tested in the second quarter 2016. The purpose of the grinders is to provide finely ground material that will be used to determine how much additional e-scrap can be processed per melt due to improved processing efficiency. The Company will be gathering quantitative processing information to determine operating scale needed to recover commercially meaningful amounts of copper, silver, gold, palladium, and possibly tin from e-scrap.

The Company is focusing on manual disassembly of personal computer (pc) towers to obtain the e-scrap for refining, and is planning on using the information being obtained to develop and evaluate the economics of a business model to accomplish the processing of pc computer circuit boards (e-scrap) for refining. Operating scale and operating economics will be determined after quantitative information is available.

KAM-Thio Process Development. Laboratory tests conducted by the Company have demonstrated that KAM-Thio has the ability to leach silver from the silver bearing glass slag generated by the Company's silver refinery. The tests have also demonstrated that KAM-Thio liquid is stable in the leaching application. Independent laboratory tests have demonstrated that KAM-Thio is able to neutralize the cyanide contained in spent cyanide solution generated by gold-silver leaching.

The amount of KAM-Thio required to neutralize cyanide is in a range appropriate for leaching gold and silver from ore. The next step for KAM-Thio technology development is to conduct a series of tests on silver-gold ore samples to measure the silver-gold leaching capabilities of KAM-Thio.

The amount of KAM-Thio needed to neutralize cyanide in gold-silver leaching solutions is several times greater than is required for fertilization of plants. Because of this there is the potential to dilute the neutralized cyanide water with fresh water and use it as a fertilizer for reclamation and re-vegetation at the mine site. This is an environmentally attractive way of using the water at the end of the leaching cycle.

Based upon information already developed, it is apparent that KAM-Thio has the potential to be a versatile product for improving residual recovery of gold and silver from ore while neutralizing cyanide and providing fertilizer water for mine site reclamation.

Laboratory research conducted by Itronics to evaluate the solubility of copper oxide using the de-silvered photo liquids showed that copper was readily dissolved by the liquid. Because of this, it is quite possible that KAM-Thio might work for leaching oxide copper. There are large resources of copper oxide mineralization being drilled in the Yerington Mining District in Nevada which means that suitable materials should be readily available for testing. If testing shows that KAM-Thio works, it could provide an environmentally attractive method for copper recovery from copper oxide deposits. KAM-Thio would be used instead of sulfuric acid to leach the copper and might recover associated gold and silver, which sulfuric acid does not do. The application would be used for large deposits and so evaluation of the application for future development could prove to be attractive.

The Company plans to proceed with KAM-Thio application development after the expanded pilot leaching operation is fully functional at the increased scale. Based on current precious metals and copper market outlook, the Company believes that the silver-gold mine cyanide application should be given development priority due to a stronger near term precious metals market outlook.

Zinc Flue Dust Process Development. Itronics in 2015 announced a technical breakthrough by successfully testing electrowinning as a process to recover metallic zinc powder from zinc enriched liquids that are produced by leaching zinc oxide from zinc bearing flue dust. The innovative zinc recycling technology Itronics is developing is expected to eliminate the waste completely by converting all components to saleable goods (a new "Zero Waste Technology"). The process being developed may use up to 40 percent less electrical energy compared to conventional zinc refining. The potential energy savings would be a strong economic driver for the project.

Battery Recycling Evaluation: The Company is studying the potential use of the electricity generating contents of silver batteries and "non-rechargeable" alkaline batteries as a source of raw material for use in manufacturing the GOLD'n GRO fertilizers and for silver production. The alkaline batteries contain potassium, zinc, and manganese which may be recoverable using the Itronics ZinLix leaching technology and are raw materials needed for manufacturing GOLD'n GRO fertilizers. If the ZinLix process works, it will provide a stable lower cost domestic source of critical raw materials needed for GOLD'n GRO manufacturing and would represent another "Zero Waste Techology" for the Company. The leaching technology currently under pilot scale development would be used for this application. If a project is initiated, it will determine the ability to use this battery waste as a raw material source for GOLD'n GRO fertilizer manufacturing and for non-seasonal silver, zinc, and manganese product sales.

Once the Company has completed the installation and start up of the grinders obtained to process e-scrap, it will be possible to evaluate processing of silver oxide batteries which have to be crushed or ground up prior to introduction into the refining furnace. Processing silver oxide batteries would increase the silver feed to the refinery and would be non-seasonal. It is also possible that fertilizer components could be removed from the ground up batteries by leaching prior to

refining them to recover the contained silver. This possibility still needs to be evaluated.

Auric Fulstone Project. In 2015 Itronics announced that its subsidiary, Whitney & Whitney, Inc., has identified surface high grade zinc-lead-silver mineralization at its Auric Gold & Minerals Fulstone copper-gold exploration project. Within the Auric Fulstone project area, the Company has discovered surface high grade zinc, lead, and silver mineralization that contains anomalous molybdenum in a large area that is geochemically anomalous for zinc. It has also discovered high grade copper mineralization that contains anomalous gold and molybdenum in a separate area that is anomalous for copper. Discovery of the potential for significant zinc, lead, silver, and molybdenum mineralization increases the economic attractiveness of the project by adding possibly significant, near surface, zinc, lead, silver, and molybdenum values to the over-all copper and gold values that are expected to be identified as the project is explored.

#### **About Itronics**

Headquartered in Reno, Nevada, Itronics Inc. is a "Creative Green Technology" Company which produces GOLD'n GRO specialty liquid fertilizers, silver bullion, and silver-bearing glass. It owns a large Iron Oxide Copper Gold (IOCG) mineral property (the Auric Fulstone Project) in the prolific Yerington Copper Mining District in northwestern Nevada. Within the Auric Fulstone project area, the Company has discovered surface high grade zinc, lead, and silver mineralization that contains anomalous molybdenum in a large area that is geochemically anomalous for zinc. It has also discovered high grade copper mineralization that contains anomalous gold and molybdenum in a separate area that is anomalous for copper. The Company's goal is to achieve profitable clean technology driven organic growth in specialty GOLD'n GRO fertilizers, silver, zinc, and minerals. The Company's technologies maximize the recovery and use of metals and minerals, maximizing sustainability.

Through its subsidiary, Itronics Metallurgical, Inc., Itronics is the only company with a fully permitted "Beneficial Use Photochemical, Silver, and Water Recycling" plant in the United States that converts 100 percent of the spent photo liquids into GOLD'n GRO liquid fertilizers, silver bullion, and silver bearing glass. This is internationally recognized award winning "Zero Waste" Technology. The Company is developing a portfolio of environmentally compatible "Zero Waste" processing and mining technologies. Itronics has received numerous domestic and international awards that recognize its ability to successfully use chemical science and engineering to create and implement new environmentally clean recycling and fertilizer technologies.

The Company's environmentally friendly award winning GOLD'n GRO liquid fertilizers, which are extensively used in agriculture, also are beneficial for lawns and houseplants and are available at the Company's "e-store" on Amazon.Com at <a href="http://www.amazon.com/s/ref=bl\_sr\_lawn-garden?ie+UTF8&field-brandtextbin=GOLD%27n+GRO&node+2972638011">http://www.amazon.com/s/ref=bl\_sr\_lawn-garden?ie+UTF8&field-brandtextbin=GOLD%27n+GRO&node+2972638011</a>.

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