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Itronics Reports 2016 Third Quarter Sales up 13 Percent

RENO, NV--(Marketwired - December 13, 2016) - Itronics Inc. (ITRO) a diversified fertilizer and silver producing green technology company today announced third quarter sales increased 13 percent with a 17 percent increase in fertilizer sales. First nine months sales decreased 18 percent on a 17 percent decrease in fertilizer sales and a 14 percent increase in silver sales.

Total Revenues for the third quarter ended September 30 were \$230,869 compared to \$205,200 in the prior year quarter. Total Revenues for the nine months ended September 30, 2016 were \$1,199,249 compared to \$1,461,262 in the same period in 2015. Nine month GOLD'n GRO fertilizer sales volume decreased by 21 percent and revenues were down 17 percent due to a shift in product mix. The sales decline occurred in the first half and was due to heavy rains in our California markets during the first quarter and a reduction in fertilizer purchases by nut tree growers due to an almost 50 percent collapse in the farm prices for almonds and English walnuts. Silver sales increased 14 percent. Photo Services decreased 1 percent on an 8 percent increase in spent silver-bearing photoliquids received. Silver content of those liquids was slightly less than in the same period in 2015 and is now in the unprocessed photo liquid inventory for future recovery.

With test refining of e-scrap beginning, Itronics is expecting silver sales to make a significant contribution to total sales in 2017. The Company believes that the increase in GOLD'n GRO fertilizer sales in the third quarter marks a turning point from weather induced decline to new application driven growth, since most of the third quarter growth was from sales in new crop applications. Overall, the expected contribution from silver sales is expected to create significant sales growth for the Company. Growth in GOLD'n GRO fertilizer sales would expand total sales growth even more.

Itronics is aggressively advancing development of its sustainability maximizing portfolio of new "Zero Waste" technologies whose objective is to create new non-seasonal lines of business using the Company's core technologies. The focus of the leaching and fire refining technology extensions is on pilot scale development of refining feed materials that contain silver and other precious metals, along with zinc and other base metals.

Early in the fourth quarter the Company announced that assembly of the five times pilot leach plant scale-up is complete. The new leaching technology has advanced to the point that a fourth product, elemental sulfur, is now being recovered. Removal of sulfur increases the capacity of the silver refining furnaces which are now being used for testing the use of the silver concentrate from the pilot plant to recover base and precious metals from the e-scrap.

A melting campaign to develop e-scrap refining procedures has been used to determine quantities of silver concentrate and e-scrap that can be processed and the fire refining procedures to do this. The new process is now producing metal bullion, copper-silver matte, and glass slag. Representative samples of each product category have been submitted to an independent laboratory for measurement. This work is demonstrating that the current scale of test refining may well be profitable as a part of existing operations. While not yet large, silver sales will provide an expanding non-seasonal sales component to mitigate the seasonality of the GOLD'n GRO fertilizer sales.

The Company's progress in developing its integrated technology portfolio is attracting inquiries from large corporations for joint venture development, licensing, and supply possibilities. The Company is participating in a successful strategic manufacturing, licensing, and marketing agreement with one of the largest fertilizer companies in the United States for development and marketing of the GOLD'n GRO fertilizers. Itronics is interested in developing strategic relationships with other companies as appropriate for the technology of interest; for example, the e-scrap refining development and expansion, the zinc flue dust technology development, and application development of the KAM-Thio technology at one or more mine or industrial projects. The Company is seeking a similar type of relationship for development of its Auric Fulstone zinc silver lead copper gold project in the Yerington Mining District.

The Company recently entered into a preliminary supply agreement with a northern Nevada Company that dismantles e-scrap and sells the harvested components. This Company is supplying Itronics the circuit boards recovered from discarded computers for use in the test refining that is now on-going. This is a strategic relationship that is expected to provide community job opportunities for people with disabilities, including veterans.

2016 First Nine Month Sales Results

Unaudited Revenues for the third quarter and nine months ended September 30, 2016 together with comparative figures for 2015 are presented below:

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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 and further integrate its operations by developing a portfolio of core "zero waste" technology extensions to establish year-round non-seasonal sales in new markets and to produce internally generated raw materials for use in GOLD'n GRO fertilizers. The focus of these technology extensions is on processing materials that contain silver and other precious metals, and zinc with other base metals.

GOLD'n GRO Fertilizers. The Company has identified a potential new environmental benefit that may be obtained by using GOLD'n GRO fertilizers. Based on experience, the Company has observed that the non-nutrient metals cadmium, lead, and mercury are not soluble in the GOLD'n GRO fertilizers. Vegetable growers have a need to minimize uptake of cadmium from the soil by vegetable crops.

The Company's distributor is performing field tests that are demonstrating that one of the GOLD'n GRO fertilizers is able to reduce cadmium uptake from high cadmium content soil for certain vegetable crops. Field testing is continuing and includes some changes in fertilization procedures that are necessary for the program to work. Plans for introducing the new fertilizer application and recommended changes in fertilization procedures are being delayed until the procedures for managing cadmium are better defined by the regulatory authorities.

Over time, cadmium levels have increased in agricultural soils, leading to increases in cadmium uptake by crops. Cadmium build up in agricultural soils is occurring worldwide and is especially important for vegetables and field grains. 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 grains is desirable to minimize its presence in the human diet.

Silver Production. The Company has completed a refining campaign which includes incorporating ground up personal computer circuit board scrap (e-waste) to provide quantitative data that can be used to evaluate the feasibility of refining e-scrap to recover its copper, silver, gold, palladium, and possibly its tin content. This work is ongoing and is now producing metal bullion, copper silver matte, and silver-bearing glass.

Assembly of the FeLix, SuLix leaching technology pilot operations five times scale up is now completed and start up testing is underway. The pilot circuit is operational at its previous scale. The expanded pilot leaching plant is expected to be fully operational in December.

An elemental sulfur powder recovery step is being developed for the process so that the sulfur can be recovered for use in GOLD'n GRO fertilizers or for sale. Recovery of elemental sulfur is producing a significant improvement in leach process efficiency which will further increase refining capacity by reducing the amount of silver concentrate delivered to the refinery, while retaining all of the silver contained in the starting solids.

E-scrap Processing Feasibility Study. In the second quarter 2015 Itronics announced that it had started a feasibility study to determine whether e-scrap (personal computer circuit boards) processing can be integrated into the new refining operation. Significant progress is being made and minimum quantities needed for economic viability have been identified and are now being tested in the refining process.

The Company is gathering quantitative processing information to determine the operating parameters needed to recover commercially meaningful amounts of copper, silver, gold, palladium, and possibly tin from e-scrap. Sufficient work has been completed so that the Company is able to estimate the amount of personal computer circuit board scrap that it will require to support minimum scale commercial operation. The Company has entered into a preliminary agreement to purchase personal computer circuit boards from a northern Nevada computer services company that disassembles discarded personal computers and sorts the contents for sale to recyclers. The economics of a supply arrangement are being evaluated as part of the on-going refining development work.

KAM-Thio Process Development. The KAM-Thio technology is being developed by using one of the already proven and field tested GOLD'n GRO fertilizers. Development of this technology is expected to add non-seasonal chemical sales to the silver/gold mining industry, and possibly for use in other industries for cyanide neutralization. As KAM-Thio is developed, it will become a non-seasonal component to expanding GOLD'n GRO fertilizer sales.

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 Company plans to proceed with this work once the expanded pilot leaching circuit is operational and the e-scrap processing feasibility study is nearer to completion.

Zinc Flue Dust Process Development. An Itronics press release dated March 17, 2015 announced a technical breakthrough by successfully testing electro winning 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. This work was put on hold in the second half of 2015 while higher priority projects are being completed.

The zinc price has recently been at a four-year high and is expected to stay in the range of its current price or trend higher. This increase in zinc price makes development of the zinc flue dust recovery technology more desirable to the Company due to cost savings that could be achieved by using recovered zinc to replace primary zinc that is currently purchased for manufacture of the GOLD'n GRO zinc micronutrient fertilizers which are a significant percentage of total GOLD'n GRO fertilizer sales.

The Company's new five times scaled up leach reactor system, and the previous smaller leach reactor system are now available to be used for the necessary leaching test work that must be completed to perfect the new process. A timetable to proceed with this work has not yet been established, but sustained higher zinc prices will provide an economic incentive to activate this 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. Once the Company has completed the testing and startup of e-scrap refining, it will evaluate processing of silver oxide batteries which have to be crushed or ground up prior to introduction into

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the refining furnace. Processing silver oxide batteries would increase the silver feed to the refinery for use in refining e-scrap and would be non-seasonal.

The alkaline batteries contain potassium, zinc, and manganese. The potassium and zinc are recoverable using Itronics' leaching technology and are raw materials needed for manufacturing GOLD'n GRO fertilizers. The manganese remains in the solid residue from leaching. In the second quarter a decision was made to begin laboratory evaluation to develop leaching technology to solubilize manganese. The work is producing some positive results and is progressing with the lab work being performed on a "time availability" basis.

Auric Fulstone Project. An Itronics press release dated January 20, 2015 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 contain 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 potentially 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. The Company is evaluating options for developing this project and has been discussing joint venture development with potentially interested parties. Copper, zinc, and silver are all at multi-year highs which is creating investor interest in successfully funding and launching this program.

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 contain 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 and maximize 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 photoliquids 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, can be used for lawns and houseplants, and are available at the Company's "e-store" on Amazon.Com at http://www.amazon.com/s/ref=bl_sr_lawn-garden?ie=UTF8&field-brandtextbin=GOLD%27n+GRO&node=2972638011

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