Press Release Archives: 01/25/2018

Itronics Reports 78 Percent Sales Increase in Fourth Quarter and a 29 Percent Increase for 2017

Updates Operation Expansion and Diversification Progress

RENO, Nev., Jan. 23, 2018 (GLOBE NEWSWIRE) -- Itronics Inc. (OTC:ITRO), a diversified fertilizer and silver producing green technology Company, today summarized its operations and diversification progress and announced total fourth quarter sales increased 78 percent on a 39 percent increase in fertilizer sales, and a 7,815 percent increase in silver sales. Full year sales increased 29 percent on a 20 percent increase in fertilizer sales, and a 5,138 percent increase in silver sales.

Total Revenues for the three months ended December 31, 2017 were \$419,038 compared to \$235,945 in the same period in 2016. Total Revenues for the full year ended December 31, 2017 were \$1,850,379 compared to \$1,439,878 in the same period in 2016, a 29 percent increase.

The year 2017 marked transition for Itronics during which the Company's new five times scale up pilot leaching reactor was started up and the Company succeeded in getting its breakthrough e-scrap refining process operational. The start of e-scrap refining marks the beginning of Phase III of the Company's e-scrap refining study which began in 2015. Silver sales are starting to provide an expanding non-seasonal sales component to mitigate the seasonality and weather influenced variability of GOLD'n GRO fertilizer sales.

Now that test refining of e-scrap has begun, the Company is expecting silver sales to make a significant contribution to total sales in 2018. Growth in GOLD'n GRO fertilizer sales in 2018 will expand total sales even more.

A bullion shipment and a shipment of silver-copper bearing glass were settled in the third quarter, and two shipments were settled in the fourth quarter 2017. Sale of the glass completes proof of concept for the breakthrough e-scrap refining process and validates that the e-scrap can be completely converted to saleable products and thereby eliminated from the environment. Itronics has now proven its second "zero waste" technology and non-seasonal silver product sales are expanding.

Eighteen months ago the Company produced its first 1.5 ounce button of Silver bullion from e-scrap. Recently the refinery poured its first 500 ounce bar of silver bullion from e-scrap and has since made a shipment of 500 ounce bars to its finish refiner which will be settled in the first quarter.

In 2017 the prices of copper, zinc, silver, gold, and palladium increased sharply, in some cases to multi-year highs. Many forecasters are predicting that gold and silver prices will significantly increase from current levels. Copper and tin are at multi-year highs. The Company is now producing silver bullion that contains silver, gold, palladium, copper and tin and expects to benefit significantly as production is expanded and metal prices continue to increase.

In the first quarter of 2017 the Company's subsidiary, Whitney & Whitney, Inc., staked 28 lode claims at the Fulstone Project to expand coverage of the high-grade zinc anomaly it announced in early 2015. A new confidential project report was prepared, and based on discussions intended to identify a joint venture development partner for the Fulstone Project an update of this report was being prepared at year-end with completion scheduled for January 2018. The updated report identifies five target areas and recommends a 10-hole investigative drill program consisting of two drill holes for each target area.

In the second half of 2017 the Company conducted a detailed preliminary investigation to determine if the new KAM-Thio technology would be able to leach residual silver and gold and eliminate the residual cyanide from ore that had been leached with cyanide. On October 17, 2017Comstock Mining Inc. announced that it was working cooperatively with Itronics on this project. Itronics summarized preliminary results of this work in a press release on December 19, 2017. The results were very encouraging and the investigation is expected to be continued in 2018.

The Company continues to receive and review inquiries and expressions of interest in participating in developing one or more of its "Zero Waste" technologies.

Twelve Month Sales Results

Unaudited Revenues for the fourth quarter, and 12 months ended December 31, 2017 together with comparative figures for 2016 are presented below:



Operational Developments

The Company is diversifying and further integrating its operations by developing a portfolio of core breakthrough "zero waste" technology extensions to establish year-round non-seasonal sales in new markets and produce internally generated raw materials for use in the GOLD'n GRO fertilizers. The Company's plan is to operate its technologies and to expand the scale of operations as funding and market conditions permit.

In September the City of Reno issued a new five-year "zero discharge" operating permit for the Company's factory in Stead, Nevada. The new permit includes requirements to be met for obtaining an additional five-year operating permit for the manufacturing and research & development operation. The Company owns and has been operating at its Stead location for 17 years and is pleased to have the continued support from the City of Reno for its operation and expansion plans.

Nevada is continually showing that it is a business-friendly state with well-known tech companies including Apple, Google, and Tesla moving to northern Nevada. The influx of new and the expansion of existing manufacturing companies in northern Nevada has produced a significant increase in land values. The Company's manufacturing plant in Stead, Nevada is a major asset and is strategically located near a rail siding, which is next to the Reno-Stead Airport, and has significantly increased in value over the past year. We expect this property to continue to increase in value because of the influx of large tech manufacturing and distribution companies in northern Nevada.

GOLD'n GRO fertilizers. The Company's hydromet processing is now recovering iron and sulfur for use as raw materials for manufacturing GOLD'n GRO micronutrient zinc fertilizers. Elemental sulfur is also being produced. The elemental sulfur is being evaluated to determine its best use as a raw material or product going forward.

In March 2017Itronics announced that its goal for minimum stable storage of four years for its GOLD'n GRO micronutrient fertilizers has now been demonstrated to exceed eleven years, which opens up national and international sales opportunities. The Company's current sales are regional in the California markets

GOLD'n GRO micronutrient liquid zinc fertilizer is now stable enough so that a customer from anywhere in the world could purchase the fertilizer, ship it a long distance, hold it in a warehouse until needed, and then use it or distribute it to farmers or farm retailers for seasonal needs.

A potential customer can justify purchasing GOLD'n GRO in larger quantities for use over more than one fertilizer season due to freight cost savings that greatly exceed the interest cost of the funds used to make the purchase. The freight savings make this a profitable transaction for United States based customers, both distributors and growers. The Company believes that this interest cost savings compared to shipping cost would apply to foreign purchasers as well.

In May 2017 the Company placed a consumer fertilizer, GOLD'n GRO 6-3-9+4% Sulfur, for retail sales through Buy Nevada First Gift Shop, located at 4001 S. Virginia St. in Reno. The fertilizer is a plant food for use on house plants and garden plants and has been generating on-going sales. Due to the enthusiastic customer response to this fertilizer, the Company has added a lawn fertilizer, GOLD'n GRO 20-1-7+3% Sulfur, to this retail offering. This fertilizer is for lawns and can be used for fertilization from early spring to late fall. The Company started this retail program in response to many northern Nevada customer requests.

In 2016 The Company identified a potential new environmental benefit that may be obtained by using GOLD'n GRO fertilizers to reduce the uptake of cadmium from the soil by vegetable crops.

The Company's distributor performed field tests in 2016 that demonstrated that two of the GOLD'n GRO fertilizers, when applied together, are able to reduce cadmium uptake from high cadmium content soil by broccoli and romaine lettuce to a level of "non-detect" in harvestable plants. Two application approaches have been identified to reduce cadmium soil availability to the plants. The Company is providing support for field testing on spinach to further develop this new technology.

Silver Production. The Company has begun a fourth refining campaign which includes incorporating ground up personal computer circuit board scrap (e-waste) to provide quantitative data that is being used to evaluate the feasibility of refining e-scrap to recover its silver, gold, palladium, copper, and tin content. This work is on-going and is now producing silver bullion and silver-bearing glass. This production is non-seasonal and will increase Itronics sales as production continues and expands in 2018 and future years.

The FeLix, SuLix leaching technology pilot operation five times scale up is fully operational for use for batch leaching. It is being used as a pilot-scale batch operation to separately leach iron and sulfur from the low grade silver concentrate produced by the Company in its photoliquid desilvering operation.

The leaching recovery process is being expanded into three separate processes. Separation of iron in liquid form, separation of sulfur in liquid form, and separation of elemental sulfur. The residue that remains after the three process steps is a high grade silver concentrate which is delivered to the silver refinery for use in e-scrap refining.

Now that e-scrap refining is underway, the Company plans to focus on expanding the FeLix, SuLix hydromet pilot plant and improving its operational efficiency in 2018.

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. The Company is gathering quantitative processing information to determine the operating parameters needed to expand the operation to recover commercially meaningful amounts of copper, silver, gold, palladium, and tin from e-scrap.

The Company's strategic joint venture with Disability Resources New2U Computers, which employs people with disabilities, is providing a reliable supply of circuit boards that have been stripped to the Company's specifications for processing. The Company has entered into an agreement for sales of its silver bullion, and a separate agreement for sales of its silver-copper bearing glass. With these agreements in place, the financial terms are known and sales can be increased as production expands.

Improvements to the refining operation were made to increase per melt production from the furnaces by 35 percent in the fourth quarter. Plans are being implemented to further expand per melt production approximately an additional 40 percent in the first quarter 2018 by adding an e-scrap grinder to the operation. Further production expansion using the existing furnaces may be achievable as more operating experience is gained.

Research into availability of e-scrap in northern Nevada has identified a large enough supply of circuit boards (e-scrap) to support a 100 times increase in the Company's pilot scale e-scrap refining operation. The Company has now begun planning to expand the pilot operation in stages, by adding more furnaces, to increase the capacity of the operation by at least 100 times.

In 2017 the Company began Phase III of this study which is to operate the refining process on a pilot scale. The objective of Phase III is to optimize the new refining process and to develop enough operational knowledge so that a plan for expansion to larger scale commercial scale operation by adding more and larger furnaces can be developed.

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.

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 Company began to evaluate this on cyanide leached ore samples in the second half of 2017 using samples provided by Comstock Mining Inc. from its Virginia City operation. The bulk of the analytical work needed to measure silver and gold in all test samples is being performed by an independent laboratory. The work is on-going and an understanding of how KAM-Thio works on cyanide leached silver/gold ore is being developed. The Company's plan is to perform similar tests on samples of unmined ore to determine if the KAM-Thio technology can replace cyanide at the Virginia City mine.

The Company's plan is to introduce and operate the KAM-Thio technology through licensing joint ventures with mining companies that have suitable silver/gold deposits and leached mine tailings that need remediation. Study of the requirements to actually use KAM-Thio leaching at a mine site indicates that a recovery system consisting of leaching followed by metal recovery will have to be developed. The new processing system will include neutralization of residual cyanide in the ore that is being treated making this a revenue producing environmental remediation process that is non-seasonal.

Zinc Flue Dust Process Development. An Itronics press release dated March 17, 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. 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 multi-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.

The Company's smaller leach reactor system is now available to be used for the necessary pilot scale leaching test work that must be completed to perfect the new process. A time table to proceed with this work has not yet been established, but sustained higher zinc prices will provide an on-going economic incentive to activate this project. The Company has reached agreement with a zinc flue dust producer who will supply material for testing once a decision is made to proceed with this development 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 start-up of e-scrap refining, it will 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 refining e-scrap and would be non-seasonal.

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. The Company has begun laboratory evaluation to develop leaching technology to solubilize manganese. The work has produced some positive results. The lab work is currently on hold due to higher priority work that needs to be completed to support on-going pilot scale operations.

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 in 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. 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.

At the end of 2016 Auric Gold & Minerals received an advance from a project partner for the purpose of staking up to 28 additional lode claims to expand the claim coverage of the high grade zinc anomaly that has been identified in the Fulstone Project Area. The claims were staked in the first quarter 2017. In the second quarter, an update of the confidential Fulstone project technical report was started and was completed early in the third quarter. In the fourth quarter, a second update of the Fulstone project report was started and is scheduled for completion in January 2018. The updated report identifies five target areas and recommends drilling two investigative holes in each target area.

The Company is continuing to evaluate options for developing this project and is discussing joint venture development with potentially interested parties. Copper, zinc, and silver are all at multi-year highs which is stimulating investor interest in getting development of this project funded and launched.

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. The Company's goal is to achieve profitable green 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 by doing this 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 beneficial "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 green 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:

https://www.amazon.com/Goldn-Gro/s?ie=UTF8&page=1&rh=i%3Aaps%2Ck%3AGold%27n%20Gro

Due to expanded retail customer interest, GOLD'n GRO fertilizer may now be purchased in Reno, Nevada at "Buy Nevada First Gift Shop," 4001 S. Virginia St.

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