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Itronics Silver-Iron-Zinc-Sulfur Leach Process to Increase Silver Refining Capacity Up to 10 Times and Reduce Costs by Up to 90 Percent

RENO, NV--(MARKET WIRE)--Jul 25, 2008 -- Itronics Inc. (OTC BB:ITRO.OB - News) (Frankfurt:ITG.F - News) (Berlin:ITG.BE - News) today reported that its wholly owned subsidiary, Itronics Metallurgical, Inc., has completed pilot leach tests which show that its new process will increase per melt refining capacity by up to 10 times and reduce per ounce refining cost up to 90 percent.

Itronics Metallurgical has been working on this process for several years and described the technology in press releases dated November 6, 2007 and December 11, 2007. The silver-iron-zinc-sulfur concentrate is produced by the Itronics Metallurgical photoliquid demetallization process. The concentrate is dried and sent to the refinery for silver recovery, refining, and sale. The concentrate has a relatively low silver content in relation to the iron and sulfur. Presently some of the iron and zinc goes into a glass slag and some of the iron and zinc combines with the sulfur to form an "iron matte," which has some silver in it and which must be reprocessed to recover the remaining silver.

The purpose of the new technology is to remove the iron, zinc, and the sulfur from the concentrate to reduce the amount of concentrate sent to the refinery, and to reduce the amount of glass slag and iron matte produced by the refinery. The expected financial benefits of the process are to: (1) increase per melt silver refining capacity by up to 10 times with no increase in per melt cost by reducing the amount of silver concentrate sent to the refinery by up to 90 percent; (2) reduce waste by producing an iron-zinc bearing liquid (Itromet FeLix Process), and a sulfur bearing liquid (Itromet SuLix Process) that can be used as a raw material in GOLD'n GRO fertilizers.

Small pilot scale leaching tests conducted in the first half of 2008 are producing a recovery of iron and zinc of more than 85 percent and up to 90 percent of the contained sulfur. The bulk volume of the residual silver bearing solids is reduced by up to 90 percent. The residual solids contain all of the silver along with other non-nutrient impurities. With a 90 percent reduction in bulk volume, the melting furnace will now be able to produce up to 10 times more silver with each melt, at no increase in cost. The other positive outcome is that the iron, zinc, and sulfur content in the produced liquids is high enough to work well for GOLD'n GRO fertilizer manufacturing. This will help stabilize some of our fertilizer raw material costs once it is implemented.

"We are excited by this positive outcome of this clean technology development," said Dr. John Whitney, Itronics' President. "We are working on the leach plant design, preparing a capital budget, and a construction schedule. We project the leach plant can be built within six months after obtaining capital funding."

Itronics Metallurgical has identified several other potential applications where the FeLix and SuLix processes could reduce processing costs and reduce waste by profitably converting material presently being wasted into commercial products:

-- Processing steel wool (ion exchange) cartridges which are widely used in the United States to perform on site silver removal from photographic liquids at user sites where hauling is not required. Both iron and silver would be recovered. This is a large source of iron and photo silver.

-- Processing the cores of non-mercury bearing silver batteries to recover zinc and silver.

-- Processing the cores of non-mercury bearing alkaline batteries to recover zinc and manganese.

-- Processing flue dusts produced by steel mills to recover zinc and iron. This is a potentially large future use.

-- Processing of concentrates produced by certain silver-zinc mines. While this would require more application development work to match the processes to specific concentrates, its potential is huge.

"Itronics Metallurgical is frequently asked if it can accept and process steel wool cartridges. This category of silver-bearing photographic waste has not been accepted because of the narrow profit margins available. The same is true for non-mercury bearing silver battery cores. The new technology is cost reducing and eliminates waste by producing fertilizer raw materials, making it economically attractive. We have already conducted laboratory and pilot tests that have validated that the process will work on these materials," said President Dr. John Whitney.

On-going clean process technology developments are establishing the basis for continuing long term growth. Itronics' continuing expansion is a result of years of research and development that has made its innovative vertically integrated photochemical

recycling technology that completely converts the waste stream to pure silver, and its high quality GOLD'n GRO brand of environmentally compatible fertilizers a success. GOLD'n GRO Guardian Deer Repellent is a direct extension of the GOLD'n GRO technology and opens up a large new market segment for the Company's products.

About Itronics

Headquartered in Reno, Nevada, Itronics Inc. is a "Creative Environmental Technology" company. Itronics, through its subsidiary, Itronics Metallurgical, Inc., is the only company with a fully permitted "Beneficial Use Photochemical, Silver, and Water Recycling" plant in the United States that can convert used photoliquids into pure silver and GOLD'n GRO liquid fertilizers. The Company also provides environmentally compatible mining technology development, project planning, and technical services to the gold mining industry and operates the popular InsideMetals.com web site, <http://www.insidemetals.com>, which provides a value-added WORLD VIEW of Gold Producer Stocks, Mineral Producer Stocks, Junior Gold Stocks, and Junior Mineral Stocks. Itronics has received numerous domestic and international awards that recognize its ability to successfully create and implement new environmentally compatible recycling and fertilizer technologies.

The Company's environmentally friendly GOLD'n GRO liquid fertilizers can be used for lawns and houseplants, and are available, along with liquid fertilizer injectors, at the Company's "e-store" catalog at <http://goldngro.com>. The popular Silver Nevada Miner bars are available at the Company's "e-store" catalog at <http://www.itromet.com>.

VISIT OUR WEB SITE: <http://www.itronics.com>

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Source: Itronics Inc.