ITRONICS INC Form 10KSB May 25, 2005

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 10-KSB

(Mark One)

(X) ANNUAL REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended **December 31, 2004**

() TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES

EXCHANGE ACT OF 1934 (No Fee Required)

For the Transition period from to

Commission file number 33-18582

ITRONICS INC.

(Name of small business issuer in its charter)

<u>Texas</u> <u>75-2198369</u>

(State or other jurisdiction of (I.R.S. Employer Identification Number)

incorporation or organization)

6490 South McCarran Boulevard, Building C, Suite 23 Reno, Nevada

<u>89509</u>

(Address of Principal Executive Offices) Zip Code

Issuer's telephone number: (775) 689-7696

Securities registered under Section 12(b) of the Exchange Act:

Title of each class Name of each exchange on

which registered

None None

Securities registered under Section 12(g) of the Exchange Act:

None

(Title of class)

Check whether the issuer (1) filed all reports required to be filed by Section 13 or 15(d) of the Exchange Act during the past 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes (x) No ()

Check if disclosure of delinquent filers in response to Item 405 of Regulation S-B is not contained in this form, and no disclosure will be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-KSB or any amendment to this Form 10-KSB. (x)

State issuer's revenues for its most recent fiscal year: \$1,720,049.

The aggregate market value of the voting stock held by non-affiliates, computed by reference to the average of the bid and asked prices for such stock as of March 31, 2005, was \$12,357,275.

As of March 31, 2005 there were issued and outstanding 191,182,367 shares of the Registrant's Common Stock.

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ITRONICS INC. AND SUBSIDIARIES

2004 FORM 10-KSB ANNUAL REPORT

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ITEM 1.

DESCRIPTION OF BUSINESS.

Itronics Inc. (OTCBB: ITRO; Frankfurt and Berlin Bremen Stock Exchanges: ITG), is the inventor and developer of the "Beneficial Use Photochemical, Silver, and Water Recycling" technology that produces environmentally beneficial GOLD'n GRO fertilizers, and 5 troy ounce, 0.999 pure, Silver Nevada Miner numismatic bars.

Headquartered in Reno, Nevada, Itronics Inc. is one of Nevada's leading process technology companies and a world leader in photochemical recycling. The Company also provides project planning and technical services to the mining industry. Itronics, through its subsidiary, Itronics Metallurgical, Inc., is the only company in the world with the integrated technology to extract more than 99 percent of the silver and virtually all the other toxic heavy metals from used photoliquids and to use this "Beneficial Use Photochemical, Silver, and Water Recycling" technology to produce environmentally beneficial, chelated, multinutrient liquid fertilizer products sold under the trademark GOLD'n GRO, animal repellent/fertilizer products to be sold under the trademark GOLD'n GRO Guardian, and 5 troy ounce 0.999, pure, Silver Nevada Miner numismatic bars.

Itronics was one of five finalists for the 2001 Kirkpatrick Chemical Engineering Award, the most prestigious worldwide award in chemical engineering technologies. Dr. John Whitney, Itronics' President, was selected as

Nevada's Inventor of the Year for 2000 and is now a member of the Inventor's Hall of Fame at the University of Nevada, Reno.

The Company currently operates the following two business segments under separate wholly owned subsidiaries:

1. <u>Photochemical Fertilizer</u>: * This segment, known as Itronics Metallurgical, Inc., operates a photochemical recycling plant and is developing new silver-gold refining technology. Revenues are generated by photochemical management services, sales of photochemical concentrators, sale of silver, and sale of GOLD n GRO liquid fertilizer products. Construction of a commercial scale photochemical processing and fertilizer manufacturing plant was completed in February 2000. Production in the plant started in 2001 and meaningful commercial sales of GOLD'n GRO fertilizers began in 2002.

*In 1995 Itronics initiated a legal review of various segments of RCRA (Resource Recovery and Conservation Act)law that might pertain to Itronics and its customers. Itronics reached the conclusion that certain of its large scale customers are exempt from RCRA since the value of the customer's portion of the recovered silver exceeds the processing costs charged. Itronics also concluded that once the various photo solutions are 100% utilized in fertilizer or other products, then all Itronics customers will be exempt from RCRA requirements. Itronics believes it is the only organization in the U.S. with the ability to achieve this distinction. Consequently, when referring to the operations of other organizations, or to the general market, the term photowaste is used, and when referring to Itronics' operations the term photochemical is used.

2. <u>Mining Technical Services</u>: This segment, known as Whitney & Whitney, Inc., provides mineral project planning and technical services to the mining industry. It has specialized knowledge in all aspects of mineral project development and has been deeply involved in gold mine development for more than 20 years. It employs technical specialists with expertise in the

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areas of mining, geology, mining engineering, mineral economics, material processing, and technology development. Technical services have been provided to many of the leading U.S. and foreign mining companies, several public utilities with mineral interests, to various state agencies, the U.S. and foreign governments, and the United Nations and the World Bank.

The Company has three wholly owned subsidiaries, Whitney & Whitney, Inc. ("WWI"), Itronics Metallurgical, Inc. ("IMI"), and Itronics California, Inc. (ICI), a 92.5% owned partnership, Nevada Hydrometallurgical Project ("NHP"), and an 82.53% owned joint venture, American Hydromet. A brief description of each organization follows:

1. <u>Itronics Metallurgical</u>, <u>Inc.</u>:

IMI is a wholly owned subsidiary of the Company. IMI was established in 1981 to manage the metallurgical and materials processing operations being developed under WWI and American Hydromet research and development programs. IMI has been the main provider of management services to American Hydromet since 1986. IMI is now managing the photochemical/GOLD'n GRO fertilizer segment as discussed below. IMI is responsible for precious metal and other material product sales, and markets a five ounce silver bar bearing a unique hallmark, "Silver Nevada Miner".

2. Nevada Hydrometallurgical Project:

Nevada Hydrometallurgical Project ("NHP") is a research and development partnership formed in 1981 to fund research into potential commercial applications for certain hydrometallurgical process techniques developed by the U.S. Bureau of Mines Research Center in Reno, Nevada between 1970 and 1979. A number of potential commercial applications were defined by NHP, one of which is the American Hydromet silver/gold refining technique. In late 1985, NHP assigned its interest in the silver/gold refining technique to American Hydromet. NHP retained its proprietary interest in the other potential commercial applications for future developments. NHP continues as a financing and technology owning partnership. The Company owns 92.5% of NHP.

3. American Hydromet:

American Hydromet is a Nevada joint venture that was formed in 1985 to develop certain silver and gold refining/recovery technology and to create business based upon such technology. The photochemical fertilizer segment now being managed by IMI is owned by American Hydromet. The ownership interests in American Hydromet are: NHP for 76.5%, IMI for 1%, and American Gold & Silver Limited Partnership ("AG&S") for 22.5%. AG&S is a Nevada limited partnership, for which WWI serves as the general partner and owns a general and limited partnership interest totaling 11%. The Company owns a 37% limited partnership interest in AG&S. In total, the Company owns approximately 83% of American Hydromet.

4. Itronics California, Inc.:

Itronics California, Inc. (ICI) was acquired in March 1999 by Itronics Metallurgical, Inc. ICI, originally named PD West, Inc., was acquired for its phosphoric acid recycling technology. ICI had no business operations in 1999, but plans are to utilize the phosphoric acid technology and may eventually operate IMI's photochemical services and GOLD'n GRO fertilizer business in California.

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5. Whitney & Whitney, Inc.:

WWI was incorporated in 1977 and is a wholly owned subsidiary of the Company. WWI is primarily a mineral consulting firm that provides planning and technical services to the mining industry. The broad range of services provided by WWI includes mineral economics, geological studies, mining and cost engineering, and project management services. WWI has extensive experience with base metals, precious metals, such as gold and silver, specialty minerals, such as molybdenum and tungsten, coal, and industrial minerals. WWI performs substantial services for small, medium, and large mining projects. WWI has historically performed services for many leading U.S. and foreign mining companies, various state agencies, for the United States and several foreign governments and the United Nations. WWI was under contract with the Country of Bolivia from 1986 through early 1992 to assist it in developing its mining industry.

SUMMARY HISTORY OF OPERATIONS

Whitney & Whitney, Inc. was incorporated in Nevada in 1977 to provide a wide range of technical services to the mining industry. During the 1980's, WWI completed several multi-client fertilizer marketing studies. Also during this time period, WWI was contacted by state and local environmental officials concerning the problem of photographic wastes, laden with silver and other toxic heavy metals, being dumped in local sewer systems.

In 1988 the Company acquired WWI and its subsidiaries and partnerships. The internal ownership was restructured so that WWI and the other subsidiaries and partnerships are now directly owned by the Company.

Over the years, the mining technical services business was highly cyclical, closely following the base and precious metals industries, and specifically, the price of copper, other base metals and gold. This condition pointed out the necessity of expanding the Company's business into new industries. When considering the fertilizer marketing studies previously performed, along with the growing national issue of sewer system contamination with toxic photowastes and silver toxicity to fish, it seemed to be a natural extension of WWI's existing expertise to expand into the photowaste recycling business. In 1987 the decision was made to move forward with research and development of a process to extract silver from photographic liquid wastes and the necessary permits to establish an R&D facility under RCRA were obtained. In 1988 a patent and literature research project regarding the use of photowastes in fertilizer was begun. In 1989 experimentation with processed run of plant liquids as fertilizer was begun. It took until 1997 to develop and demonstrate a satisfactory product and to complete university testing to demonstrate its agronomic viability. A licensing and sales agreement was signed with a major fertilizer company in 1998, and another two years were needed to obtain financing, complete permitting, install an operational plant and to demonstrate that the new technology would work on a commercial scale. By the first quarter of 2001 the Company was positioned to develop sales for more than a dozen liquid fertilizer products.

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In 2001, at the request of its distributor, the Company developed a chelated zinc product with the objective of selling the product in truckload quantities. This product development was successful and provided the basis for the first tank truck load sales in the fourth quarter of 2001. During 2002 this new bulk product was successfully introduced into the distributor network. During 2002 work on a bulk GOLD'n GRO product that could be used as a "base liquid" in the distributor's proprietary field blends was commenced. In 2003 development work on a second chelated zinc product for bulk sale was initiated. Field testing of both new bulk products was conducted during 2003 and in late 2003 they were approved for introduction into the distributor sales network for 2004.

During the same 2001 to 2003 period, more than two dozen formulations were evaluated for suitability and market potential. By the end of 2003, product line development had been completed, and 13 fertilizers covering three categories have been established: multi-nutrient liquid fertilizers, chelated micro-nutrient liquid fertilizers, and GOLD n GRO base liquid. The fertilizers are sold both to the general public and through licensed and non-licensed distributors, and the base liquid is sold only through licensed distributors. Product improvement and new product development will continue, but the Company's focus in 2005 and future years will be primarily on GOLD'n GRO Liquid Fertilizer Sales expansion and on expansion of the services business as needed to support increasing GOLD'n GRO fertilizer sales. The Company believes that the market for the products in the western U.S. are large enough to produce sales levels needed for the Company to become profitable within 2005 or 2006.

In 2003 the Company participated in the development of an animal repellent/fertilizer that will be sold under the trade mark GOLD'n GRO Guardian. Using one of the GOLD'n GRO multi-nutrient liquid fertilizers as a base liquid, which has the property of being taken into the plant as a fertilizer and imparting odor and taste characteristics that are offensive to deer and other animals, such as rabbits, that eat plants. The GOLD'n GRO Guardian product was field tested during 2003 and was approved for use by the North American Deer Management Network in the fourth quarter of 2003. GOLD'n GRO Guardian is a repellent fertilizer product and must be registered under both the pesticide regulations and the fertilizer regulations for each state in which it will be sold. The product must also be registered with the Federal EPA as an insecticide. Introduction of this product for commercial sales will be delayed until the registrations are completed. Subsequent to December 31, 2004, the Company acquired the interest in the GOLD n GRO Guardian trademark, product rights, and the repelling product formula owned by Mr. Howland Green. The Company now owns 100% of all rights related to GOLD n GRO Guardian. Mr. Green has become a director of the Company and is Northeast Manager for GOLD n GRO Sales Development. Substantial funding over twelve to twenty-four months will be required to complete the EPA registration process.

The animal repellent/fertilizer market is new for Itronics. The users of this product will be upscale homeowners and commercial and municipal facilities, and commercial nurseries. The deer population is growing rapidly in the

northeastern U.S. and so the center of gravity for this product is the northeastern seaboard states. The initial sales center will be in Rhode Island. The markets being served are the Commercial Landscape and wholesale and retail Nursery segments. The GOLD'n GRO Guardian line of products is strictly for non-food plant applications so the distribution channels are different from the channels being developed for GOLD'n GRO fertilizers.

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The U.S. market for deer repellents is believed to be well in excess of \$50 million per year. Products currently in the market are believed to have limited effectiveness so a real opportunity exists for a line of systemic products that are effective for several weeks after each application. The GOLD'n GRO Guardian is demonstrating effectiveness for 8 to 12 weeks, and may be able to provide "year round" protection. The Company plans to pursue development of this line of products as rapidly as possible.

During the period 1999 through 2003 the Company developed a "low temperature vacuum distillation" machine that operates at room temperature and is able to remove up to 80% of the water from chemical solutions without damaging the chemicals, producing a high silver content concentrate that can be shipped as a commercial product in inter-state commerce. The distilled water is clean enough for re-use on site and the reduction in volume of material needing to be shipped produces 80 percent reduction in transportation cost making shipment possible anywhere in the United States. These machines have been released for commercial sale under the trademark "Itronics Metallurgical Photochemical Silver Concentrators". Sales of the concentrators are projected to increase as the Company expands its need for photochemical raw materials to support increasing GOLD'n GRO and GOLD'n GRO Guardian sales.

The Company had slowed development and expansion of its silver refining technology and its silver refinery until the GOLD'n GRO liquid fertilizer development was essentially completed. In early 2003 the company re-activated its development efforts at a low level and also began a low level of product development for glass and tile formulations and products. During 2003 the first pieces of glass/ceramic tile were produced. In 2005 and future years the silver refining technology development and the glass/ceramic tile products development efforts will be expanded in parallel with expansion of GOLD'n GRO fertilizer sales.

With the successful development of a glass/ceramic tile product, the Company achieves the ability to recycle 100 percent of the materials received from customers, including waste that is generated internally during processing.

The Company's development of leaching chemicals for the silver/gold mining industry has also been on hold pending completion of the GOLD'n GRO liquid fertilizer development. In 2003 a small amount of laboratory testing was performed with the objective of developing technical knowledge of how to use the liquid photo-chemistry as a leaching agent for metal extraction. In 2004 this work was expanded and a small pilot circuit will be established to chemically process certain categories of silver-bearing solid wastes in 2005.

A more detailed discussion of the business of the Company contained in Item 1 of this report, based on the Company's two business segments described above, follows. Operating results of the two segments are discussed in Note 12 to the Consolidated Financial Statements.

PHOTOCHEMICAL FERTILIZER

1. Operations

The Company operates a commercial scale plant to receive used photochemical liquids, recover the silver and other metals, and convert the demetallized solutions to liquid GOLD'n GRO fertilizer products. Revenues are generated by photochemical management services, sale of

photochemical concentrators, sale of silver, and sale of GOLD n GRO liquid fertilizer products. A critical component of this integrated manufacturing system is to match, within a reasonable range, the incoming volume of photochemical liquids with the utilization of those liquids in fertilizer or other manufactured products. At the outset, regulatory constraints were imposed to limit the amount of photochemical materials that the Company could handle until a commercial fertilizer was perfected, or some other commercial use for the material was developed. Development of the GOLD n GRO fertilizer is now complete and the Company is expanding the business.

Photochemical services operates as a regional business in northern Nevada, serving more than 200 customers in the northern Nevada market, with the dominant position in this market. A satellite service operation has been established in the San Francisco Bay Area which is a large market with at least three strong competitors. The Company is able to compete effectively based upon pricing and service quality.

Growth of silver output is driven by photochemical processing to support GOLD'n GRO fertilizer sales. There are some opportunities to expand silver output separate from photochemical recycling, but profit margins for the refining services are very small when compared to the inventory requirements and the security risk. Because of these factors, gold and silver refining services are limited to categories of materials where the Company's proprietary technology can be used and that offer better profit margins than conventional precious metal refining. The Company will be actively looking at opportunities to expand this segment in 2005 and future years.

In early 2003 the Company initiated a program to market the Itronics Metallurgical Photochemical Silver Concentrators to large consumer photography and medical x-ray facilities throughout the United States. This is a cost effective method for the Company to expand its photochemical supply for use in GOLD'n GRO fertilizer manufacturing. In 2004, Photochemical Silver Concentrators were added to the Company s "e-store" catalog and the Company has received an order for two Concentrators and several leads and viable requests for proposal from several other potential customers. The Company presently has proposals out to potential customers that could lead to more than \$500,000 in sales of the Photochemical Silver Concentrators. This marks the beginning of a shift in market focus from obtaining the majority of photochemical raw materials by picking up the materials by truck directly from the customer s location to obtaining the majority of its photochemical raw materials by receiving concentrated material through the interstate commercial trucking system. Photochemical silver concentrators are expected be a source of revenue growth in 2005 and future years as the Company continues to expand nationally. Itronics' photochemical blending technology is designed to utilize the concentrate in fertilizer, after it is demetallized.

A 35,000 square foot manufacturing plant in Reno/Stead, Nevada was purchased in 1999. Construction of the liquid processing area was completed in early 2000, and a "shake-out" period in which small batches of photochemicals were processed and small batches of fertilizer were manufactured. By late 2000 the new facility had demonstrated the ability to "demetallize" the received photo liquids to required EPA levels, thereby proving the technical viability of the new technology on a commercial scale.

Spent photochemical liquid received from customers are logged and recorded, then tested for silver content and contaminants. The Company achieves high contaminant control standards by

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working proactively with its regular customers. Once testing is completed, the photographic solutions are processed.

Photochemicals presently being handled by the Company are:

Ammonium thiosulfate concentrate

Aqueous Ammonia
Developer
E1ectro-flake
Film
Fixer
Sodium meta-bisulfite concentrate
Stabilizer
Steel wool/metallic ion exchange cartridges
Scrap paper that accompanies film
The Company is evaluating the potential for use of acetic acid in fertilizer, and if this proves to be technically feasible will begin to accept used acetic acid solutions as well.

2. Growth Plans and Implementation

In March 2003 IMI renewed a definitive licensing, manufacturing, and distribution agreement with Western Farm Service (WFS), one of the largest liquid fertilizer bulk retailers in the western United States. The five year agreement, with optional five year renewal periods, grants WFS an exclusive license and right to manufacture and market IMI's GOLD'n GRO line of bulk liquid fertilizer products for the Turf & Ornamental and Specialty Agricultural markets in the states of Arizona, California, Hawaii, Idaho, Oregon, and Washington.

In 2004 one of the Company s GOLD n GRO sales representatives was transferred to Washington state to develop GOLD n GRO fertilizer sales in Washington, Oregon, and Idaho. The registration process for selected GOLD n GRO fertilizer products was completed in those states in March 2005.

Implementation of the Company s "Beneficial Use Photochemical and Water Recycling" technology is continuing with expansion of the number of branches within the licensed distributor network selling GOLD n GRO fertilizer. The Company s licensed distributor network is also continuing to generate orders for original chelated micronutrient and chelated multinutrient products.

The Company has been working with its licensed distributor network to identify market segments into which the GOLD'n GRO fertilizer products can be successfully sold. This process has identified three fundamental uses, or functions, of the GOLD n GRO products, which are (1) replace existing products that do not fully satisfy existing needs, (2) develop new products which will satisfy presently unfulfilled needs, and (3) develop products that can be blended with existing proprietary products to improve their effectiveness. Replacement products are expected to have higher sales growth rates than products developed to fulfill the other two functions, defined as development products. The GOLD n GRO Guardian product being developed as an animal repellant/fertilizer fits into the second category, and the GOLD n GRO Base Liquid fits into the third category.

GOLD'n GRO 9-0-1+7% Zinc, a chelated micronutrient, was developed to replace existing products as a direct result of this process, successfully introduced into the California market to

replace a product that was not fully satisfying customer needs. This product has been primarily responsible for the Company s sales growth over the last several years. This same process has led to the development of a second replacement product, GOLD n GRO 9-0-2+3% Zinc a chelated micronutrient which is being sold by the distributor network and is expected to have a growth rate similar to that of the GOLD n GRO 9-0-1+7% Zinc.

During 2002 and 2003 the Company worked with its licensed distributor network to develop a GOLD'n GRO Base Liquid that could be used as a supplement in the distributor's proprietary liquid fertilizer field blend programs, with the purpose of improving the effectiveness of those blends. This product was approved for sale by the distributor network during the second quarter of 2003 and is being carefully introduced into the market. The base liquid is being sold in truckload quantities and future usage is expected to be several times greater than the usage of the GOLD'n GRO Zinc products. The GOLD'n GRO Base Liquid is expected to eventually be used at the rate of 5 to 15 percent in many of the distributor's field blend mixes sold to their grower customers. This presents an opportunity for the Company to participate in the distributor's proprietary bulk liquid blend sales programs in a meaningful way. In the near term, the Company believes that the California market for this product alone is large enough to produce sales levels needed to become profitable within the next 12 to 24 months.

In June 2003 the Company began a cooperative effort with North American Deer Management Network, LLC to develop a single application fertilizer to be sold under the trademark GOLD n GRO Guardian that also serves to repel animals such as deer and rabbits. Preliminary testing has been completed showing the products to be compatible, producing a positive growth response while at the same time repelling, but not harming, the unwanted animals. Holly Ridge Nursery & Landscape Company managed the project and funded a detailed effectiveness study conducted by the University of Rhode Island that covered one full growing season. Results of the study will be utilized to support product registration applications and to complete patent applications. Holly Ridge also funded commercial trials in various locations. The Company sold the first bulk quantity of its GOLD n GRO 8-8-8+4% Sulfur to Holly Ridge in July 2003 and a second bulk load was sold in 2004. This cooperative effort provides the Company with an introduction of its GOLD n GRO line of fertilizer products into the northeastern U.S. and allows development of the GOLD n GRO Guardian animal repellant/fertilizer market nationwide. In September 2003 The North American Deer Management Network, LLC completed field testing and approved GOLD n GRO Guardian for use by its members. Subsequent to December 31, 2004, the Company acquired the interest in the GOLD n GRO Guardian trademark, product rights, and the repelling product formula owned by Mr. Howland Green. Mr. Green has become a director of the Company and is Northeast Manager for GOLD n GRO Sales Development. As part of the research and development of this product, it was determined that the GOLD n GRO Guardian will need to be registered with the EPA prior to commencement of commercial sales. It is estimated it will require substantial funding and twelve to twenty-four months to complete the EPA registration process.

The above describes a flexible approach to developing markets for the GOLD n GRO fertilizers which will continue and may require plant modifications to accommodate the new products as their development is completed and they are cleared for sale. Using this flexible approach, the Company believes that it has now identified and established GOLD'n GRO bulk products that have large enough markets to provide the sales volumes needed to achieve profitability within the next 12 to 24 months.

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The GOLD'n GRO fertilizer product line provides several products for the turf and ornamental markets, 3 products for the nursery and specialty agriculture markets, and 5 high quality chelated micronutrient products which can be used in all of the markets. The GOLD'n GRO chelated micronutrient and chelated multinutrient products are considered to be "Specialty Liquid Fertilizer" and fit into the Specialty Fertilizers segment of the national and international fertilizer markets, generally sold in smaller quantities and at higher prices than NPK fertilizers (Nitrogen (N), Phosphate(P), and Potassium(K)), which are sold as single nutrient products in large tonnages at relatively low bulk commodity prices. The Company presently sells its commercial GOLD n GRO products in 2.5 gallon, 55 gallon, and 250 gallon

containers and partial or full truck load quantities of up to 4,800 gallons.

The Company is becoming a significant supplier of chelated micronutrient and chelated multinutrient specialty products for several reasons, one of which is that improved nutrient uptake is being demonstrated in large scale field applications of the GOLD'n GRO products when compared to applications that use established chelated micronutrient products. Improved crop nutrient uptake reduces nutrient costs and increases crop yields, generating a significant economic benefit for the grower customers. A second reason is that the photographic byproduct materials used as base components provide the chelates at a much lower cost compared to purchasing new "unused" chelates. A third reason is that the GOLD'n GRO liquid products are specifically designed for fertigation application in micro-sprinkler and drip irrigation, which is a growing application method and requires liquid fertilizer products with superior stability in irrigation water under widely varying conditions. These demonstrated advantages of the GOLD'N GRO liquid product line are provided by the Company's proprietary "Beneficial Use Photochemical, Silver and Water Recycling" technology.

Most of the GOLD n GRO products are currently registered for sale in Arizona, California, Colorado, Hawaii, and Nevada, and GOLD n GRO 9-0-1+7% Zinc and GOLD n GRO 9-0-2+3% Zinc are registered in Idaho, Oregon, and Washington. GOLD n GRO 8-8-8+4% Sulphur is also registered in Rhode Island, Massachusetts, Connecticut, Delaware, New Jersey, Pennsylvania, and New York. GOLD'n GRO bulk product sales are now established in Arizona and California, with the majority of the sales being made in California. In April 2003 the first truckload sale of chelated micro-nutrient products was made to a peach grower in western Colorado. This grower is continuing to use the products. Registration of selected GOLD n GRO fertilizer products in Washington, Oregon, and Idaho was completed in March 2005. Implementation is underway to begin sales in those states. The Company is developing bulk customers in northern Nevada and has started discussions with potential distributors in selected states not covered by its licensed distributor network, including the northeastern states, Florida, and Texas.

The Company has expanded the number of GOLD'n GRO liquid fertilizer formulas being offered through its "e-store" catalog. Some formulas are now being offered in 2.5 gallon containers. This expanded product offering makes GOLD'n GRO available to two important Professional Market segments: the Landscape Maintenance Market and the Nursery and Greenhouse Market. In addition, a number of homeowners with large lawn and garden areas have requested the 2.5 gallon container, which is similar in weight and formula analysis to many of the dry fertilizer products being offered in wholesale and large retail outlets. Internet sales are still relatively small as a percentage of total sales, but have grown in each of the past two years.

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The Company believes that this expanded product offering will significantly increase internet sales.

In March 2005 the Company completed a marketing agreement with Chemilizer Products, Inc. of Florida to market two of its fertilizer injectors to the landscape maintenance and wholesale and retail nursery markets. The injectors have been added to the Company s "e-store" and will also be marketed through its fertilizer distribution network.

The project to develop and sell a line of animal repellant/fertilizer products under the trademark GOLD n GRO Guardian provides direct GOLD n GRO product marketing and distribution for the northeastern states into the Landscape Construction and Maintenance, and the wholesale and retail Nursery and Greenhouse markets. The new GOLD n GRO Guardian product line presents the opportunity to develop products for the animal repellant market, an emerging national market in which product offerings are currently limited. Deer and other plant eating animals are becoming a major urban problem and are now doing tens of millions of dollars in damage to urban landscaping each year.

The Company is continuing to develop new sources of used photochemical liquids, although it presently has more than adequate volume of in-coming photoliquids to support current and near term GOLD'n GRO fertilizer sales

growth. The Company has been developing Itronics Metallurgical Photochemical Silver Concentrator technology to reduce the cost of transporting the used photochemical liquids to the Reno manufacturing plant. The Company has also been identifying and qualifying non-photochemical sources of used chelates and has been identifying and qualifying non-photochemical waste streams that might be useable as substitute materials for virgin additive raw materials that the Company presently purchases.

GOLD'n GRO fertilizer products are formulated to match potential new sources of secondary chelates so that as GOLD'n GRO fertilizer sales continue to expand the Company can begin to use "non-photo" chelates. The Company has identified and qualified industrial waste streams that will allow it to replace certain virgin additive materials that it now purchases to make GOLD'n GRO fertilizers. Replacing the virgin additive materials with materials from secondary sources provides the Company with equivalent materials at lower cost. Some manufacturing process changes will be required to accommodate these adjustments in raw material sourcing, but this will be beneficial due to reductions in raw material costs and the improved cost stability that will be achieved.

Demand for the Company's photochemical services business continues to increase due to growth in the use of conventional and digital photography in the markets being serviced. The Company believes the supply of these used photochemical liquids is more than adequate to support continuing growth in fertilizer demand. Customer services are provided under renewable annual service agreements which must be negotiated in advance, and once established cannot readily be interrupted or cancelled, since the customers generate the liquids on an on-going basis, typically have limited on site storage, and must be provided continuous reliable service by the Company. Due to this characteristic, the Company must provide sufficient raw material storage capacity at its manufacturing facility to accommodate seasonal fluctuations in both raw material supply and in fertilizer sales, and the Company must establish and maintain a balance between used photochemical liquid supply and fertilizer sales.

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A phenomenon that emerged during 2003 is the rapid growth in digital print photo finishing. The Company s volume of used silver-bearing photoliquids increased 45% during the third quarter of 2003 and 66% in the fourth quarter of 2003 compared to the prior year third and fourth quarters. Much of this growth is attributable to increased consumer demand for long-life, high quality color photo prints from digital images. To accommodate this growing demand, internet digital processing companies, regional photo labs, and mini labs are installing equipment which prints digital images onto state of the art silver-halide photo paper, creating used silver-bearing photoliquids just like conventional photography.

During the second half of 2004 the Company reached the limits of its on site storage capacity and in late November 2004 a major supply contract was terminated by mutual agreement. The Company has adequate liquid inventories and incoming supplies to meet its anticipated fertilizer manufacturing needs through 2005. The Company is now actively marketing its Photochemical Silver Concentrators and believes that it will be able to maintain photochemical raw material supplies to meet on-going fertilizer sales growth in future years.

Between 2001 and the present the Company developed an advanced design for a Photochemical Silver Concentrator that produces water pure enough to be used to make up new photo fixer chemicals, presenting the photoprocessor with the opportunity to reuse the water and thereby achieve 100 percent recycle of the used photochemical waste stream. The Photochemical Silver Concentrator also produces concentrates, which, after demetallization, are suitable for use in GOLD'n GRO fertilizer manufacturing.

In 2002 the Company delivered five of these Photochemical Silver Concentrators to the Department of Defense. Installation and testing at certain military bases is continuing under separate contract. Two additional Photochemical Silver Concentrators were delivered in the third quarter of 2003. This program is regarded as a pilot project, which may lead to providing "Beneficial Use Photochemical, Silver, and Water Recycling" services to all branches of the U.S. military and is being developed by the Department of Defense in consultation with the Federal EPA.

During the first quarter of 2003 a services agreement was signed with the NASA Johnson Space Center in Texas which already has an installed photochemical silver concentrating system. The Company is actively marketing its "Beneficial Use Photochemical, Silver, and Water Recycling" service to other U.S. government agencies and private sector companies which already have installed photochemical silver concentrating systems, so that as new raw materials are needed, customers can be added quickly.

The Company's sales of 5 ounce "Silver Nevada Miner" bars through the Itronics "e-store" are continuing, although those sales are still relatively small. The sales of finished silver bullion from internally recovered silver will expand, but will continue to fluctuate until GOLD'n GRO sales reach larger volumes.

During 2003, the Company completed a key phase of the research project to produce formulated glass products from the glass slags produced by silver refining at the Stead, Nevada recycling facility. The research has identified three product categories: (1) a glass ceramic mixture that can be used to produce tile and other shapes suitable for glazing and commercial use; (2) glass formulations that can be used as "lead free" low and intermediate temperature glazes for decorative tile and the craft pottery trade; and (3) specialty boro-silicate glass

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formulations. The next phase of the research will focus on production of small quantities of products for evaluation and market studies and is expected to be completed over the next two to three years.

The Company's current fertilizer emphasis is on developing bulk liquid product sales. The "Beneficial Use Photochemical, Silver, and Water Recycling" technology is fully integrated, and is being implemented with a cost structure that anticipates large volume material throughput. This is based on previously developed information that more than 100 million gallons of used liquid silver-bearing photochemicals are generated in the United States annually. Using conversion ratios developed for the GOLD'n GRO products, this is enough volume to support the manufacture and sale of more than 200 million gallons of liquid fertilizer products, or 1 million tons. Over 20 million tons of fertilizer products are sold annually in North America. The Company's current sales level is less than 0.005 percent of the indicated market.

The Company's manufacturing plant is presently configured for an initial manufacturing capacity of 7.2 million gallons per year or 36,000 tons of GOLD'n GRO products. Planned storage and truck loading capacity expansions and automation of some manufacturing functions, must be completed before this capacity can be achieved. Some of these requirements are discussed more fully below. Unexpected new market opportunities have already required modification of certain expansion plans. As the Company continues to identify and develop its GOLD'n GRO liquid fertilizer product markets, additional unforeseen changes could require additional plan modifications.

In 2002 the Company completed the construction of a bulk liquid fertilizer tank truck load out facility which was expected to handle anticipated growth in demand for the chelated micronutrient zinc product during the next two years. With the introduction of additional bulk products, additional load out facilities are needed, at a capital cost estimate of \$400,000. This project is scheduled for completion in the first half of 2006.

In 2004 the Company completed installation of a heat exchange system for an installed cost of \$196,000. This system has provided more than a five times increase in manufacturing capacity for certain GOLD n GRO fertilizers.

3. Markets and Competition

I. Photochemical Recycling and Silver Refining Estimates are that there are more than 1,500 generators of photographic hazardous waste in the State of Nevada and more than 500,000 throughout the United States. This

includes printed circuit board manufacturers, photo off-set printers, photographic developers, lithographers, photographers, micro-filming (banks, companies, etc.) and x-ray users (dentists, doctors, hospitals, podiatrists, orthopedic surgeons, veterinarians, radiologists and industrial x-ray users). The Company estimates the total annual market for recycling this category of waste to be in the range of \$400 to \$500 million.

Nationally, more than 80 million ounces of silver are consumed in photomaterials annually. Approximately 30% of this is lost through disposal. The Silver Institute indicates that silver usage in photography is stable, but may decline modestly over the next several years.

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The photowaste management industry is not systematically organized, but is fragmented with many small operators and some large waste haulers. The small operators typically specialize in one or more types of photowaste, but usually prefer film. The large waste haulers pick up all categories of waste, and may also handle film and paper. Photowaste management as a singular business is not yet organized by any large company in the United States. This is a niche that the Company seeks to fill.

Silver recovery from black and white and x-ray chemistry is an established industry. Silver recovery is typically accomplished at a user's site by specialized recovery equipment, normally installed and maintained by way of a service agreement with the vendor or vendor representative. The service of silver recovery is particularly entrenched in the medical field where the service business supplies a silver recovery unit and also picks up film waste for sale to a waste film processor. Black and white and x-ray chemistry is typically monometallic with silver being the main EP-Toxic metal. The recovery units are at best 95% efficient in routine operation, so significant amounts of silver are discharged into the environment. This compares to the Company's technology which routinely recovers 99.975% of the silver content.

Metal recovery from color and paper processor chemistry is not as well established, although the silver recovery units used in the medical sector are also used by color processors. A characteristic of color chemistry and paper processing chemistry is that it is polymetallic, and contains from four to seven of the metals listed as EP-Toxic. There are stringent EPA discharge limits for these metals. This sector has the normal competitive factors found in the medical sector, except that most of the companies in the business are only focusing their recovery efforts on silver, while ignoring the other three to six toxic metals commonly known to occur in this chemistry.

Waste film processing is an established competitive industry, highly segmented and characterized by many small processors, most of which are located in the eastern part of the United States. The number of processors in the West Coast is limited, believed to be one in California, one in Washington State and one in Utah. Some waste film is exported to Korea, Japan and China. Eastman Kodak is now the largest and dominant waste film processor in the eastern U.S. and may be the largest silver recycler in the United States. Kodak purchases scrap film from its large film processing customers.

The Company is aware of digital imaging and its impact on usage of conventional photography. The impact is different for each of the major segments; medical, color photography, and printing/microfiche. Digital imaging has made significant inroads into printing/microfiche processing with an almost 85% reduction in volume of photographic liquids over the past ten years. Several years of experience with digital imaging has demonstrated that there is significant degradation of the quality of digital images, often in three or four years, requiring copying onto new disks, which is time consuming and costly. Consequently, microfiche is making a comeback. The new digital cameras are getting wider usage. In 2001 it became clear that contrary to popular belief, digital photography is creating a new source of photowastes from internet companies that combine digital imaging services with the ability to print high quality photographs for their customers. The Company has had one such customer since 2001, where photochemical volume has been increasing dramatically on a monthly basis. This rapid growth continued in 2004. Digital methods are being adopted in the medical industry, and although the medical sector is relatively high growth with the aging

imaging has had the effect of slowing the growth of waste photo liquids being generated and may lead to a decline in future years.

A larger impact on photo waste generation has been the pressure for companies to reduce the amount of waste generated at the operating sites. In photography, water was used in copious quantities for film rinsing and large quantities of low chemical content waste liquids were generated. With the tightening of regulation of discharge of contaminated waters the equipment manufacturers have focused on reducing water usage. This attention to reduction of waste water has contributed to a reduction in the quantities of waste liquids being generated. It is expected that efficiency of use and associated waste reduction will continue, driven by increasing waste disposal costs. On-site photochemical recovery using a Photochemical Silver Concentrator and re-using the recovered water is expected to continue to become more and more attractive to photochemical waste generators.

The photochemical concentrators now being sold by the Company will further reduce water usage in the photographic industry. When the photochemical concentrator is used all the recovered water can be re-used. The concentrated liquid chemical product is purchased by the Company so photographic waste generation at the user site is completely eliminated. This technology represents an end point for the elimination of water waste in the photographic industry, and is expected to gain wider acceptance as the industry recognizes the benefits inherent in the technology when combined with the Company's service capabilities. Continuing tightening of environmental discharge rules is expected to expand demand for this service in future years.

The Company believes that it has the following competitive advantages:

- * Leading position in developing "total" photochemical recycling technology and waste management procedures.
- * Proprietary solution conditioning process and equipment.
- * Proprietary low cost silver refining process using wet chemistry (hydrometallurgy) to quantitatively separate silver from photochemical materials.
- * Proprietary "heavy-metal-free" liquid products that eliminate the need to dispose of treated photographic liquid waste in sewage treatment systems, or solid waste sites (dumps).
- * Systematic pick up services for photochemical generators.
- * Quantitative material control procedures meeting all EPA reporting guidelines.
- * Regulated as a precious metals recycler and a hazardous waste transporter, therefore, low cost and proven track record and commitment.
- * Skilled in converting technical concepts to commercial products and production.
- * Line of proprietary environmentally friendly high quality chelated liquid fertilizer products that are formulated using the "heavy-metal-free" photoliquids.

Environmental restrictions on disposal of chemicals are continuing to tighten throughout the United States with the result that now the rate of growth for the photochemical recycling business is dependent upon the rate and vigor of fertilizer sales growth.

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II. Photochemical Fertilizer

The urbanization of the United States has led to the development of an "Urban Fertilizer Market". The total fertilizer market consists of the "Agricultural Market" and the "Urban Market". The Urban Market accounts for at least \$9 billion in annual sales in the United States. The "Specialty Ag" segment of the Agricultural Market is a \$4 billion segment making the total a \$14 billion market.

The Urban market is divided into the "Home Lawn and Garden" segment, the "Landscape Maintenance" segment, and the "Nursery and Greenhouse" segment. These markets are not statistically well defined, since they are relatively new as large commercial markets, and are highly fragmented with many small regional suppliers and are growing rapidly. One well known operator in the Home Lawn and Garden and the Landscape Maintenance segments is Scotts/Stern's Miracle-Gro. Several other large companies are also active in this market.

The Company's photochemical fertilizer GOLD'n GRO 20-1-7 was developed for the Urban market as a "turf" product. Its principal customers are home owners, professional lawn service companies, golf courses, turf farms, and large municipal and commercial facilities. Since early 1997, IMI has completed development of numerous additional fertilizer products covering most of the applications being targeted in each of the referenced markets.

The Company estimates that more than 100 million gallons of photowaste liquids are generated annually in the United States. The ratio for converting one gallon of photochemical to GOLD'n GRO 20-1-7 fertilizer is approximately 1 gallon of photochemical to 4 gallons of fertilizer. This means that there is enough supply of photochemical to support the manufacture of 400 million gallons of GOLD'n GRO 20-1-7 fertilizer annually, equivalent to approximately two million tons.

The conversion rate of the chelated micronutrient products and the GOLD'n GRO base liquid is lower. An estimate of the market for the GOLD'n GRO base liquid indicated a market potential for 200 million gallons in the United States and would equate to about 1 million tons of fertilizer.

The Company estimates that on a commercial scale, the combined revenue of photochemical services, silver and fertilizer will approach \$10.00 per un-concentrated gallon of photochemicals received. Consequently, the potential market for these products and services is in the \$1 billion range.

The Company is working with its distributors on an on-going basis to identify and implement sales development programs that will increase the rate of market penetration with the GOLD n GRO products. A much greater understanding of the details of the market has been obtained directly from this process. This improved understanding is strengthening the working relationship that has been developed with our distributors and is producing continuing increases in sales in a relatively mature market.

The Company is developing branded products that have the GOLD'n GRO trademark. The Company is implementing and expanding a plan for Home Lawn and Garden sales through its web page. Significant capital, in the form of advertising budgets and the ability to carry large inventories of finished goods, is required to achieve meaningful sales in the Urban Market segments. The Company plans to expand its internet sales program over the next several years. The methods and costs of retail distribution are changing making the internet sales platform more economically feasible as a method of large scale retail selling.

In analyzing the market and industry competitors, it is apparent that two factors significantly impact the Company's ability to penetrate these markets in a meaningful way. First, the seasonal aspect of photochemical and fertilizer sales, which directly results in the second factor, the need for a much higher level of working capital when compared to other industries. Based on experience, the Company's photochemical hauling volume starts each year at comparatively low levels in the first quarter, steadily increases during the second quarter peaking in June or July, declining during the third quarter, and reaching levels similar to that of the first quarter by year end. Consequently, revenues from both photochemical liquid services and silver sales are significantly reduced during six months of each year.

To mitigate the seasonal effect on this segment of operations, the Company is investigating opportunities for processing gold mine slags and other gold/silver bearing residues that are generated by gold and silver mines in Nevada. The Company s manufacturing plant is permitted to handle large volumes of precious metal bearing waste, and the facility contains installed environmental control equipment needed for this expanded activity. The Company s employees have much of the needed expertise to do this. The Company believes that expanding silver/gold recycling services has the potential to moderate the seasonal fluctuations that will continue in the photochemical fertilizer segment.

The Company expects fertilizer sales to continue to have a strong seasonal component, with the primary sales season running from April through November each year, with an in-season low in July and August. In addition to the general seasonal nature of sales caused by normal weather patterns, unusual weather can further affect fertilizer sales, especially in winter and spring. For example, unusually cold or wet spring seasons may delay the growth cycle of various crops for which the Company's fertilizer products are utilized. To overcome weather related effects on fertilizer sales, the Company is evaluating markets in the southern areas of the United States where growing seasons are longer and, in some cases, year round.

Due to the seasonal nature of both photochemical services and GOLD'n GRO fertilizer sales, the Company must increase its net working capital to a level higher than that of non-seasonal industries. For example, some of the Company's competitors have working capital equal to their annual sales. Consequently, ongoing debt and equity funding will be required for the Company to grow, even after a profitable level of operations is achieved.

5. Research, Development, and Technology

The photochemical fertilizer (the American Hydromet Project) segment is now operating commercially, but prior to 2002 was primarily involved in research and development, with the objective of developing integrated technology that can be used to recycle photochemical materials, that recovers all of the silver and all other toxic metals from those materials, and which utilizes "heavy-metal-free" liquid photochemicals in a chelated liquid multi-nutrient fertilizer product line for turf, ornamentals, and specialty agricultural applications. The status of development of the three integrated components is more fully described below:

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The technology was developed in a semi-works plant in Reno. Development of the integrated technology is a technical innovation with global potential. There are three separate but integrated functions for handling the spent photoliquids. The first is the photoliquid demetallization and conditioning process. This process is used to demetallize and recondition the metal-bearing photofixers and photodevelopers that are picked up from photousing businesses. This portion of the process is very efficient, recovering over 99.998% of all the contained toxic metals, and a very large percentage of contained iron. There are three products from this part of the operation: (1) a metal-bearing sludge, (2) distilled water, and (3) a concentrated base liquid for fertilizer manufacturing.

The metal-bearing sludge is dried and passed to the refining operation for separation of the contained silver. More than 98.5% of the silver contained in the sludge is recovered for sale. The refining was developed specifically to handle the sludges from the liquid demetallization and conditioning process. As such, the other heavy metals and iron

contained in the sludge end up in a glass byproduct and are rendered completely inert. The Company has formulated the glass so that with minor additions of other compounds, it can be converted into usable products, such as wall and floor tile. The Company is now developing a tile product.

The reconditioned photoliquids are used as a component of fertilizers which are chelated liquid multi-nutrient NPK (Nitrogen Phosphorous-Potassium) products containing micronutrients that produce excellent results in application. Development of the fertilizer took more than 12 years and involved a number of stages of development. Important steps were: (1) patent and applications literature research to determine if similar materials were being used in fertilizer products, (2) initial plot testing, and chemical analysis of "run of plant liquid" to determine the response of turf and different plants to the non-supplemented liquid, (3) an extended period of mix testing and then large-scale field testing of the mixes to determine suitability for use on turf, (4) development of manufacturing procedures for the chosen mix, and (5) large scale field testing by different types of users to determine acceptability and to identify problems prior to implementing a commercial manufacturing and marketing program. An important factor inherent in fertilizer product development is the seasonal nature of the business. Each series of plot tests requires essentially one year because of the seasonal nature of plant growth. This lengthy product development cycle will continue to apply to new fertilizer products and means that one to three years are required to create and introduce a new fertilizer product. An additional two to three years are required to commercialize each new crop application for a new product.

Itronics believes it is the only company in the world that has successfully demonstrated the ability to manufacture an environmentally compatible fertilizer product line from liquid photochemicals. As such, Itronics now has unique proprietary technology for completely recovering the silver and for converting the waste liquids into usable "heavy-metal-free" products, thereby achieving "Beneficial Use Recycling" of the waste stream.

In 1995 the Company participated in a fertilizer product application comparison program sponsored by the University of California at Riverside. For the second consecutive year, in 1996, GOLD'n GRO 20-1-7 was rated Number 1 in the program, which compared "top of the line" multinutrient nitrogen fertilizers produced by leading U.S. fertilizer manufacturers.

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The Company conducts field trials to gather agronomic data and to develop knowledge of how the GOLD'n GRO products work on different crops. This field testing will continue as it is the most effective method for developing the field data needed to support claims of product effectiveness for specific crops. On-going field trials of GOLD n GRO fertilizer products continue to show significant improvements in crop production and quality. The trials are providing agronomic data that is being used to develop GOLD n GRO nutrition programs for the crops being tested.

The field trials are demonstrating that the GOLD n GRO products provide both agronomic and economic benefits in the "specialty agricultural" markets. Specialty agriculture includes vegetables, cut flowers, herbs and spices, and fruits and nuts of all types. These crops are relatively high value compared to field grains such as corn, wheat, and soybeans. Field trials in 2002 on cotton and on silage corn produced positive results, opening two new large acreage crops for GOLD'n GRO application development. Alfalfa is typically considered as a "hay" or "forage" crop and is generally of low to intermediate value when compared to specialty agricultural crops, however, high nutrient content alfalfa for the dairy market often commands a significant price premium which puts it at the low end of specialty agricultural crop values.

Field test results using GOLD n GRO products have been published for Alfalfa, Fresh Plums, Oranges, Sweet Corn, and Watermelons. The field test results and crop value statistics are summarized in the following table. On a national basis, the GOLD n GRO products appear to have the potential to add tens of millions of dollars in increased value and output for the indicated crops:

Return on GOLD n GRO

<u>Crop</u>	Crop Increase	Fertilizer Cost to Grower	Gross Value of the Crop Per Acre	Total USA <u>Crop</u> <u>Acres</u>
Alfalfa	+33%	3 times	\$ 351	23,000,000
Fresh Plums	Larger, Earlier	15 times	\$2,500	140,000
Sweet Corn	+11.5%	30 times	\$1,788	222,800
Oranges	+40%	3 times	\$2,300	842,000
Watermelon	+10.4%	160 times	\$1,670	184,600

A 3 year field trial on Valencia orange trees being carried out with oversight from a major university in southern California is continuing and it appears that the 35 year old trees are responding positively to the fertilization. Two year cumulative results have been analyzed and positive significant results are being obtained. Both output per tree and quality have been increased. This trial was continued through 2003 and was completed in 2004.

During 2003 the Company continued to be offered the opportunity to explore the feasibility of recycling other non-photographic materials into fertilizer. Four waste streams are currently being considered for future recycling. One of these is a high silver content waste stream.

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The Company has concluded that certain acid waste streams generated by aerospace and electronics manufacturers may be able to be converted to a form that will fit "Beneficial Use" recycling into fertilizer in association with the processed photochemical materials.

6. Environment and Regulation

I. Liability

All chemistry has a "cradle to grave" regulatory life span. This term means under Federal law, the prime generator has the ultimate liability for all generated waste as long as it exists. For example, conventional services, through storing and hauling, relocate the waste to a legal landfill or dispose it to sewer. Liability then remains for the cost of cleanup if the landfill has to be reclaimed or the contamination of groundwater develops.

However, once the spent chemistry reaches the Company's facility and has been processed, the generator's hazardous waste liability has been removed. Using the Company's process, virtually all metals, including most of the iron, are removed. The end result leaves the Company with a non-hazardous "toxic-metal-free" liquid which is legal for use in high quality GOLD n GRO liquid fertilizers. The demetallized liquids being used in the GOLD n GRO fertilizers are entirely safe for the environment.

II. Increased Regulation

While in general the Company's business has benefited substantially from increased governmental regulation of hazardous disposal by private industry, the waste management and recycling industry itself has become subject to extensive, costly and evolving regulation by federal, state and local authorities. The Company makes a continuing effort to anticipate regulatory, political and legal developments that might affect its operations, but may not always be able to do so. The Company cannot predict the extent to which any legislation or regulation may affect future operations.

In particular, the regulatory process requires firms in the Company's industry to obtain and retain numerous governmental permits to conduct various aspects of their operations, any of which permits may be subject to revocation, modification or denial. The Company is not in a position at the present time to assess the extent of the impact of such potential changes in governmental policies and attitudes on the permitting process.

III. Permits and Inspections

To the best of the Company's knowledge, it has obtained permits from all governmental agencies having jurisdiction over it, such as the EPA, Nevada Department of Environmental Protection, Washoe County Health Department and the City of Reno, Nevada. The Company is not required to obtain federal permits, but is required to have, and has obtained, local permits for its photochemical recycling facility under the provisions of the Federal EPA. Similar permits will be required of all facilities that the Company may construct. The Company's recycling facility is subject to frequent inspections and to regulations (including certain requirements pursuant to federal statutes) which may govern operating procedures for land, water and air pollution, among other matters. In particular, the Company's operations are subject to the Safe Drinking Water Act, TSCA (Toxic Substances Control Act-pursuant to which the EPA has promulgated

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regulations concerning the disposal of PCBs), the Clean Water Act (which regulates the discharge of pollutants into surface waters and sewers by municipal, industrial and other sources) and the Clean Air Act (which regulates emissions into the air of certain potentially harmful substances). Employee safety and health standards under the Occupational Safety and Health Act are also applicable to employees of the Company.

IV. Regulatory Direction

For several years the Company has been studying the various regulatory requirements under RCRA and has been working with state and local environmental officials regarding the extent to which hazardous waste regulations apply to the Company's operations. Through this process, the Company reached the conclusion that due to use of photochemicals as a beneficial ingredient in its fertilizer products, the photochemicals are not "hazardous waste" as defined in the regulations, and therefore, beneficial materials that are otherwise regulated as hazardous waste, are exempt from most of such regulations. In early 1996 the Company received concurrence from State of Nevada environmental officials that the Company's photochemical fertilizer process meets the existing RCRA requirements for exemption from all environmental regulation with the exception that certain presently conducted lab analyses of the photochemicals will continue to be required. Certain of the Company's large scale customers presently meet the exemption requirements. Present levels of fertilizer sales utilize all the photochemicals received. Once sales of all the photochemical materials are well established in the fertilizer or other commercial products, all the Company's Nevada customers will be exempt from the regulations, including hazardous material transport/manifest rules. The Company

believes that this exemption applies nationwide. Therefore, the Company intends to pursue similar concurrence from environmental officials in all applicable states, so that all its customers will be recognized as exempt from the RCRA regulations.

Environmental regulation of photowaste generators has strengthened over the last several years, and that trend is expected to continue. In the past year, heavy metal contamination of fertilizers has become a significant issue in California and other parts of the country. Public concern over this issue is expected to intensify. Management believes that the GOLD n GRO line of fertilizer products is uniquely suited to alleviating this environmental concern and that the Company is well positioned to meet future environmental needs.

MINING TECHNICAL SERVICES

1. Services offered

The Mining Technical Services segment of the Company offers a wide range of technical services to the mining industry. These include the following:

Management Support:

- Assistance in assembling mineral project development agreements and ongoing technical support during project development and after operations begin.
- Advice on mineral development strategy, economic aspects of tax policy, long term investment strategy and infrastructure development related to large and small scale mineral development.

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- Complete project development plans.
- Expert assistance in contract disputes pertaining to various technical aspects of mineral projects and the development of the technical aspects for contracts.
- Ore reserve audits, metallurgical audits and material balance reviews, and operations reviews on producing mines for senior management, outside investors, or underlying land owners.
- Mineral property appraisals for sale, acquisition, merger or financing.

Other Specialized Technical Services:

- Mineral economics and cost studies.
- Metallurgical process development.
- Open pit and underground mine planning.
- Ore reserve development.
- 2. Operations

The Mining Technical Services segment accounted for 17% of the Company's 2004 consolidated revenue. One major client produced 75% of this revenue. The client is a junior mining company with three mineral properties in Nevada. WWI provided technical assistance in moving these properties into the development and operating stages. WWI also provided administrative support. The contract with this client expired on March 1, 2005.

The primary source of new business for the Mining Technical Services segment is the reputation of WWI and its key employees. In addition, WWI expands its network of contacts by attending various mining association conventions.

In the past WWI has published specialized mineral economics and materials financial reports. WWI is evaluating re-entry into this market, with a goal of producing mining publications targeted for general investors interested in mining.

Expansion Plans

Prior to 1991, the Company had plans to directly invest or joint venture in mining projects and had formed a subsidiary to enter that market. Those plans were put on hold until completion of the photochemical fertilizer R&D program. Now that the R&D program is being converted to commercial operations, the Company has recently taken steps to expand the mining technical services presence in the mining industry, both from a services perspective and from a mining operations perspective.

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In January 1999 WWI initiated a long term R&D project to replace the use of cyanide in the extraction of metals from silver/gold and gold/copper ores. The new thiosulfate leaching technology being developed under this program utilizes the same technology as the Company s proprietary photochemical recycling process. The project, called Itronics Thiomet, is seeking to establish operating joint ventures at specific mine sites to apply the thiosulfate leaching technology. This project is on hold pending further commercial development of fertilizer sales.

In 2004 a project to establish a subscription based gold industry and gold company internet publication was begun. The web publication, called "insidemetals.com", will provide the customer with gold industry and gold company financial, production, and ore profiles on key gold producing companies. Initially, the companies to be profiled are in the Gold Company sector, which includes gold, silver, platinum, and palladium producers. The profiled companies are publicly traded on the New York and American Stock Exchanges and on NASDAQ. The publication is expected to launch in June 2005 and the target market includes gold company employees, governmental agencies, both domestic and foreign, and individual investors interested in the gold markets. In addition to providing subscription revenue, it is anticipated that the publication will enhance the Company's opportunity to obtain new sources for technical consulting work. This subscription based Internet Information Portal provides an opportunity for relatively unrestricted growth by being available to a diverse global base of potential customers who can subscribe over the internet using a secure credit card transaction.

ITEM 2.

DESCRIPTION OF PROPERTY.

I. FACILITIES.

Itronics leases approximately 3,000 square feet of office space at 6490 South McCarran Blvd., Building C-23, Reno, Nevada. IMI leases approximately 2,000 square feet of warehouse space in Reno, Nevada. This space is being used for supply storage.

IMI owns a 35,000 square foot manufacturing facility in Reno-Stead, Nevada. The building contains all the equipment used for treating the used photochemicals, preparing the recovered silver for sale, and manufacturing the GOLD n GRO fertilizer products.

W&W leases approximately 2,500 square feet of office space in Reno, Nevada. This office was closed in May 2005 and the lease will be discontinued.

II. EQUIPMENT.

The equipment being used in the recycling process is proprietary information. However, the plant for processing liquid photochemicals is a fairly typical chemical process facility consisting of appropriate arrangement of tanks and pumps. Solids produced by processing are recovered by filtration.

The refining operation consists of a material handling section, solids roasting, and a melting section. The equipment arrangements are proprietary, but the main items are pumps, tanks, filtration equipment, drying ovens, and the melting furnaces.

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The new facility is sized to process up to 100,000 un-concentrated gallons of used photochemicals per month and to manufacture up to 200,000 gallons per month of liquid fertilizer. Refinery capacity will be expanded as needed to produce up to 50,000 ounces of silver per month.

ITEM 3.

LEGAL PROCEEDINGS.

In August 2002 a supplier of equipment for the Stead manufacturing plant filed suit against the Company and its subsidiary, Itronics Metallurgical, Inc. (IMI) in Johnson County, Indiana for the unpaid amount of \$64,234 plus attorney s fees and court costs. On October 1, 2002 the plaintiff received a default judgment awarding the \$64,234 plus \$1,500 attorney s fees plus 8% interest. On November 5, 2002 the plaintiff filed a "Notice of Filing of Foreign Judgment" in Washoe County, Nevada and has received the judgment. In December 2003 a settlement agreement was accepted that required a \$10,000 payment in December 2003 plus monthly payment of \$5,161 over twelve months in 2004. Payments are delinquent as of December 31, 2004. In February 2005 the plaintiff received approximately \$6,700 by levying three of the Company s bank accounts. No further collection action has been taken.

As of December 31, 2004 a total of nine lawsuits filed in 2003 and prior years remain outstanding against the Company's subsidiaries by various equipment lessors. Five of the suits were filed in Washoe County, Nevada, two in Cook County, Illinois, one in Los Angeles County, California, and one in Oakland County, Michigan. Three additional suits covering six leases were filed in Washoe County, Nevada in 2004. The suits seek a total of \$839,934 plus attorneys fees and other costs. Six of these suits, seeking a total of \$306,990 plus costs, were settled by restructuring the leases, signing stipulated judgments and agreeing to pay total payments of \$258,390. Monthly payments on the settlements total \$12,935 and are paid over various periods ranging from 18 to 31 months. If the restructured leases are defaulted, judgments for the original claimed amounts can be entered and further collection action, including repossession of the secured equipment, can be taken. Payments on five of the restructured leases are in default, but no additional collection action has been taken. Of the six remaining unsettled suits, three have received judgments, of which one has filed for a debtors examination which was to occur in April 2005. The Company has

agreed to payment terms on that lease and the examination has been stayed until June 2005. Legal counsel is actively negotiating two of the unsettled suits. No further action has occurred on the other unsettled suit.

In February 2003 a trade creditor filed suit against the Company in Washoe County, Nevada seeking a total of \$85,525 plus attorney fees and other costs. A default judgment was entered in May 2003. No further collection action has occurred on this claim.

As of December 31, 2004 the Company s subsidiaries were delinquent on approximately \$206,200 in federal payroll taxes. The Company engaged a consultant to assist in working with the IRS to formulate a payment plan. A plan was negotiated to pay specified portions of the liability on or before January 31, 2005 and on the fifteenth of each month beginning March 15, 2005 until paid off on May 15, 2005. The Company made the required payments in January and March 2005, and paid a total of \$115,586, but did not make the subsequent payments as they became due. The Company has received final notice, notice of intent to levy, on the subsidiaries IMI and ICI

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for a total amount due of \$93,273. The notices are dated May 12, 2005. They indicate the Company has 30 days from that date to pay the tax, make alternative payment arrangements, or request appeals consideration. After the 30 days, the IRS may seize property to satisfy the debt. The IRS may also file federal tax liens for the amounts due at any time. Successful completion of a payment plan is dependent on future financing as more fully discussed in the Working Capital/Liquidity section of Management s Discussion and Analysis or Plan of Operations.

Successful settlement of the above claims is dependent on future financing, which the Company is actively seeking.

ITEM 4.

SUBMISSION OF MATTERS TO A VOTE OF ITS SECURITY HOLDERS.

None.

PART II

ITEM 5.

MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

(a). Market Information. The Company s securities are traded on the over-the-counter market under the symbol ITRO.OB, and quoted in the National Quotation Bureau, Inc.'s "pink sheets" and on the NASD Electronic Bulletin Board. In 2003 the Company s stock began trading on the Frankfurt, Germany Stock Exchange under the symbol ITG. In March 2004 the Company s stock began trading on the Berlin Bremen Stock Exchange (Germany) under the symbol ITG.

The following table sets forth the high and low bid prices for the Company's common stock for each quarter for 2003, 2004, and through March 31, 2005.

High Bid Low Bid

3/31/03	\$0.16	\$0.09
6/30/03	\$0.14	\$0.08
9/30/03	\$0.23	\$0.11
12/31/03	\$0.17	\$0.11
3/31/04	\$0.22	\$0.14
6/30/04	\$0.17	\$0.10
9/30/04	\$0.10	\$0.06
12/31/04	\$0.08	\$0.05
3/31/05	\$0.13	\$0.05

These quotations reflect inter-dealer prices without retail markup, markdown, or commissions, and may not represent actual transactions.

(b) On December 31, 2004 the number of record holders of the Common Shares was approximately 1,000.

(c) Dividends.

The Company has paid no dividends.

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Recent Sales of Unregistered Securities

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Following is a summary of unregistered securities issued during the three months ended December 31, 2004. All securities were issued subject to Rule 144 of the Securities and Exchange Commission. Generally, Rule 144 requires shareholders to hold the shares for a minimum of one year before sale. In addition, officers, directors and more than 10% shareholders are further restricted in their ability to sell such shares. There have been no underwriters of these securities and no underwriting commissions or discounts have been paid.

	Shares	Value
	<u>Issued</u>	Received
Warrant exercises for cash	500,000	\$ 40,000
Conversion of notes payable and accrued interest	7,757,236	798,094
Private Placement for cash	3,300,000	165,000
Consultant labor services	550,000	38,550

Interest on employee salary in arrears	141,515	11,787
Director fees	2,500	200
	12,251,251	\$1,053,631

During the three months ended December 31, 2004 warrants to acquire 1,650,000 restricted common shares were granted as part of the current private placement. The warrants are for three years and are exercisable at \$0.075 per share the first year, \$0.15 per share the second year, and \$0.225 per share the third year. An additional \$32,500 was received from the Private Placement late in December 2004. This resulted in the issuance of 650,000 restricted common shares in 2005 and the granting of warrants to acquire 325,0000 restricted common shares under the terms described above.

During the three months ended December 31, 2004 the accrued interest on the 2000 through 2002 Series Convertible Promissory Notes resulted in additional options to acquire 745,541 shares of restricted common stock. The options are convertible at prices ranging from \$0.10 to \$1.18.

An officer/stockholder exercised warrants totaling \$50,000 during the three months ended December 31, 2004 for a total of 625,000 shares that were issued in the first quarter of 2005. The exercise was completed by converting short term loans into restricted common stock. The same officer/stockholder also converted \$120,000 in short term loans into the current Private Placement, for a total of 2,400,000 restricted common shares and three year warrants to acquire 1,200,000 restricted common shares. These shares and warrants were issued in the first quarter of 2005 and were under the same terms and conditions as other investors in the Private Placement.

During the three months ended December 31, 2004 interest accruing on employee salary in arrears totaled \$25,761 for a total of 388,541 restricted common shares, which will be issued in 2005.

The above transactions qualified for exemption from registration under Sections 3(b) or 4(2) of the Securities Act of 1933. Private placements for cash were non-public transactions. The Company believes that all such investors are either accredited or, either alone or with their purchaser representative, have such knowledge and experience in financial and business matters that they are capable of evaluating the merits and risks of the prospective investment.

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ITEM 6.

MANAGEMENT'S DISCUSSION AND ANALYSIS OR PLAN OF OPERATION

I. Results of Operations

The Company reported consolidated revenues of \$1,720,049 for the year ended December 31, 2004, compared to \$1,268,787 for the prior year, an increase of 36%. Revenues for the Photochemical Fertilizer segment increased by \$486,016, or 52%. Revenues from the Mining Technical Services segment declined \$34,754, or 10%. The Company reported a gross profit of \$32,296 for the year ended December 31, 2004, compared to a gross loss of \$159,853 for the year ended December 31, 2003, an improvement of \$192,149. The consolidated net loss for 2004 was \$2,839,872 or \$0.020 per share compared to a 2003 loss of \$2,752,291 or \$0.026 per share.

To provide a more complete understanding of the factors contributing to the changes in revenues, operating expenses and the resultant operating loss and net loss, the discussion presented below is separated into the Company's two operating segments.

PHOTOCHEMICAL FERTILIZER

	Year Ended December 31,	
	<u>2004</u>	2003
Revenue	\$ 1,422,929	\$ 936,913
Gross profit (loss)	\$ (34,687)	\$ (182,918)
Operating income (loss)	\$(2,024,481)	\$(1,834,621)
Net income (loss) before taxes	\$(2,626,694)	\$(2,849,442)

Revenues for the Photochemical Fertilizer segment totaled \$1,422,900 in 2004, compared to \$936,900 in 2003, an increase of \$486,000, or 52%. Fertilizer sales were \$1,019,800 and \$554,300 for 2004 and 2003, respectively, an increase of 84%. The fertilizer sales increase is primarily attributable to bulk sales of the GOLD n GRO 9-0-1+7% Zinc micro-nutrient product that was introduced in the third quarter of 2001.

Photochemical recycling revenue decreased 8% from 2003 due to decreased sales of photochemical evaporators. Silver sales increased \$46,200 from 2003, an increase of 84%. The increase is attributable primarily to sales of Silver Nevada Miner silver bars and recycled film revenue.

In December 2004 photochemical recycling services provided to a major customer were discontinued by mutual agreement. This customer accounted for 59% of 2004 photochemical recycling and silver refining revenue, a total of \$201,300. In response, plant personnel has been reduced by two people. In the near term, this will result in reduced photochemical recycling revenue. However, the photochemical volume from this customer had been growing so rapidly that the supply was exceeding the Company s demand for the chemicals needed in fertilizer manufacturing, resulting in storage costs and plant inefficiencies. It is anticipated that there is enough photochemical raw material in storage to meet fertilizer production needs for at least twelve months. The loss of this customer will allow the plant time to catch up on photochemical processing, which will reduce storage costs and increase efficiency in the plant.

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The Company is in contact with major used photochemical generators, and is actively marketing Photochemical Silver Concentrators, so, for the longer term, it is anticipated that sufficient new sources of photochemical supply will be obtained to meet future fertilizer manufacturing requirements. The Photochemical Silver Concentrators typically sell for \$22,000 to \$200,000, so the loss in photochemical recycling service revenues is expected to be offset by growth in Photochemical Silver Concentrator sales during 2005 and future years.

Combined cost of sales and operating expenses for the segment amounted to \$3,447,400 in 2004, compared to \$2,771,500 in 2003, a 24% increase. Cost of sales increased approximately \$337,800 due primarily to a \$265,400 increase in direct material costs related to increased sales and \$61,000 in payroll and related costs. The changes in revenues and cost of sales resulted in a gross loss of \$34,700 in 2004, compared to \$182,900 in 2003, an improvement of \$148,200. Operating costs increased by \$338,100 due primarily to increases of \$228,800 in sales and marketing and \$60,000 in general and administrative costs. Sales and marketing increased due to a combination of the addition of a

fertilizer sales representative in early 2004 and increased corporate marketing. General and administrative expenses increased due to a \$98,000 prior year credit for expired options.

These changes in revenues and operating expenses resulted in a segment operating loss of \$2,024,500 in 2004, compared to \$1,834,600 in 2003, an increased loss of \$189,900 or 10%.

Other income (expense) decreased to a net expense of \$602,200 for 2004, compared to a net expense of \$1,014,800 in 2003, an improvement of \$412,600. Interest expense decreased \$175,000 due to the conversion into common stock of convertible promissory notes. Other income of \$187,800 was due to debt forgiveness income from the write off of long term leases.

The changes in operating loss and other expenses resulted in a segment net loss before taxes of \$2,626,700 for 2004, compared to a net loss of \$2,849,400 for 2003, a decreased loss of \$222,700 or 8%.

MINING TECHNICAL SERVICES

	Year Ended December 31,	
	<u>2004</u>	<u>2003</u>
Revenue	\$ 297,120	\$ 331,874
Gross profit (loss)	\$ 66,983	\$ 23,065
Operating income (Loss)	\$(382,145)	\$(359,324)
Net income (loss) before taxes	\$(213,178)	\$ 97,151

Mining technical services revenue totaled \$297,100 for 2004 compared to \$331,900 for 2003, a decrease of 10%. Included in these revenue figures are pass-through expenses of \$108,300 and \$118,700 for 2004 and 2003, respectively. Excluding these amounts, revenues amounted to \$188,900 and \$213,100 for 2004 and 2003, respectively, a decrease of 11%.

On March 1, 2005 the technical services contract for a major client expired and was not renewed. Excluding pass through revenue, revenue from this client was \$124,300 for 2004 and \$15,000 for the two months ended February 2005. In response, in May 2005 the Company closed the satellite office for technical services and reduced staff the equivalent of approximately three

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people. The Company s plans to expand the technical services segment are more fully discussed on page 25 of this report.

Combined cost of sales and operating expenses totaled \$679,300 for 2004 compared to \$691,200 for 2003, a nominal decrease. Included in these operating expense figures are pass-through expenses of \$108,300 and \$118,700 for 2004 and 2003, respectively. Excluding these amounts, combined cost of sales and operating expenses amounted to \$571,000 and \$572,500 for 2004 and 2003, respectively, a nominal decrease. Included in operating expense is \$74,200 in research and development costs that were not incurred in the prior year. This expense is related to the development of the insidemetals.com website as discussed on page 25 of this report. The majority of this expense is an allocation of personnel costs, which was offset by an \$81,000 decrease in payroll and related costs that are included in cost of sales

expenses.

The above changes in revenues and operating expenses resulted in a segment operating loss of \$382,100 for 2004, compared to \$359,300 for 2003, an increased operating loss of \$22,800 or 6%.

Other income (expense) decreased to a net other income of \$169,000 for 2004, compared to a net other income of \$456,500 in 2003, a decline of \$287,500. The decline is due to decreased gain on sale of GPXM and other marketable securities.

The changes in operating loss and other income resulted in a segment net loss before taxes of \$213,200 for 2004, compared to a net income of \$97,200 for 2003, a decrease of \$310,300.

SUMMARY

On a consolidated basis, the various changes in revenues, operating expenses, and other income and expenses resulted in a gross profit of \$32,300 for 2004 compared to a gross loss of \$159,900 for 2003, an improvement of \$192,100, an operating loss of \$2,406,600 for 2004 compared to \$2,193,900 for 2003, an increased loss of \$212,700 or 10%, and a net loss of \$2,839,900 for 2004 compared to \$2,752,300 for 2003, an increased loss of \$87,600 or 3%.

II. Changes in Financial Condition; Capitalization

Cash amounted to \$5,200 as of December 31, 2004 compared to \$34,500 as of December 31, 2003. Net cash used by operations was \$1,417,900 in 2004 compared to \$1,626,500 in 2003. Operating resources utilized to finance the 2004 loss of \$2,839,900 include approximately \$681,900 in expenses paid with the Company's common stock. Cash amounting to approximately \$56,800 was invested in property and equipment in 2004, primarily for equipment in the manufacturing plant. Sales of Golden Phoenix Minerals, Inc. stock and other marketable securities provided \$356,100 in cash from investing activities. Financing sources of cash in 2004 were \$843,500 in proceeds from the private placement of restricted common stock, \$235,000 from the exercise of warrants, and \$150,000 from short term loans from an officer/stockholder.

Total assets decreased from \$4,440,500 at December 31, 2003 to \$4,147,900 at December 31, 2004. Current assets decreased \$115,000, net property and equipment decreased \$38,900, and other

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assets decreased \$138,700. The primary changes in current assets were a decrease in marketable securities of \$387,100 due to the sale of GPXM and other stock, an increase in accounts receivable of \$92,400 due to a one-time billing on the GPXM consulting contract, an increase of \$146,200 in inventory due primarily to the build-up of unprocessed silver in photochemical solutions, and an increase in prepaid expenses of \$89,400 due to corporate marketing contracts. The Company is actively selling its GPXM shares to assist with its working capital needs. The Company s investment in GPXM stock decreased to a total value of \$26,200 at December 31, 2004, all of which is classified in current assets.

Total liabilities decreased from \$8,142,200 at December 31, 2003 to \$6,712,200 at December 31, 2004, a decrease of \$1,430,000. Of this amount, current liabilities decreased \$510,600 and long-term liabilities decreased \$919,400. The overall decrease in liabilities is due primarily to the conversion of \$1,962,200 in convertible promissory notes and accrued interest into restricted common stock. Current liabilities decreased primarily due to a net reduction in convertible promissory notes of \$665,300. This reduction was partially offset by increases in accounts payable of \$91,800, accrued management salaries of \$170,900, and accrued expenses of \$185,400. Nearly all of the increase in

accrued expenses is attributable to delinquent federal and state payroll taxes. Subsequent to December 31, 2004 \$115,600 of the federal payroll taxes were paid.

The above discussion and the discussion of various legal proceedings elsewhere in this report does not succinctly summarize the progress that the Company has made in implementing its business plan and improving its financial condition over the last several years. However, there has been significant progress. First, in 2004 fertilizer sales exceeded \$1 million for the first time, compared to sales in the \$500,000 range for each of the two previous years. This resulted in a gross loss for the photochemical fertilizer segment of \$34,700, which was a \$148,200 improvement over 2003 and a \$217,100 improvement over 2002. This demonstrates one of the fundamental concepts in the business plan, that a large part of the Company s operating cost structure is fixed or semi-fixed, which means that as sales rise, many of the costs will not rise proportionally, resulting in gross profits that will contribute to paying general overhead costs. This improvement in the photochemical fertilizer segment, combined with a gross profit from the technical services segment, resulted in an overall gross profit for the year, which is the first time that this was accomplished since before the move to the Stead manufacturing facility in 2000.

Addressing the Company s financial condition, improvements have been made there as well. The stockholders deficit, \$4,587,900 at December 31, 2002, has been reduced to a deficit of \$2,564,300 at December 31, 2004, an improvement of \$2,023,600. This has been achieved by the conversion of approximately \$3.4 million in convertible notes and accrued interest into common stock. One significant area of difficulty for the Company has been meeting the payments on capital lease obligations. However, the capital lease obligation at December 31, 2002 of \$1,193,900 has been reduced to \$807,700 at December 31, 2004, a reduction of \$386,200. This includes the write off five leases as debt forgiveness income in 2004 of \$187,800. The Company expects to make further meaningful progress expanding sales and reducing debt in 2005.

III. Working Capital/Liquidity

During the year ended December 31, 2004, the working capital deficit was reduced by \$395,600 to a deficit balance of \$3,215,300. \$665,300 of the improved working capital is due to a net

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reduction in convertible notes payable and accrued interest due to the conversion of convertible promissory notes into restricted common stock. This improvement was partially offset by increases in various current liabilities as discussed above. The Company has had limited cash liquidity since the third quarter of 2000. The Company has sought and obtained the funding described above, which has not been sufficient to maintain all obligations on a current basis. The cash shortage is a result of two factors. First, fertilizer sales in 2004 and prior years did not expand to the extent anticipated, so operating losses were not reduced as much as expected. Second, the \$15 million equity line of credit agreement with Swartz Private Equities, LLC (Swartz) was not available between October 2001 and May 2002 due to a Securities and Exchange Commission rule change that necessitated renegotiating the contract with Swartz and filing a new registration statement which was filed and became effective on April 30, 2002. The Swartz agreement expired on February 27, 2004. During the years ended December 31, 2004 and 2003, \$-0- and \$119,600, respectively, were received under the Swartz agreement. The Swartz equity funding was not able to function to meet the Company s ongoing working capital needs, so private placements of stock with attached three year warrants have been undertaken since the fourth quarter of 2002. \$843,500 and \$703,500 was raised from private placements during 2004 and 2003, respectively. In addition, the Company sold GPXM and other shares during the year ended December 31, 2004, raising a total of \$356,100 and \$235,000 was received from the exercise of warrants. For 2003, sale of GPXM shares raised \$786,400 and \$185,800 was received from the exercise of warrants. Subsequent to December 31, 2004 the Company has received \$560,000 from the private placement and \$6,000 from the sale of GPXM stock.

The Company is actively working to establish a longer term financing plan that will identify capital sources for the Company s financing needs over a two to three year period. Once this plan is established, needs for financing will be adjusted and the plan will be extended annually.

IV. Critical Accounting Estimates and Off-Balance Sheet Arrangements

The Company does not have any critical accounting estimates or assumptions that are so subjective or uncertain as to materially affect the Company s financial condition or results of operations. The Company also has no off balance sheet arrangements that are not otherwise disclosed in this report.

Forward-Looking Statements

Statements in this Form 10-KSB may constitute forward-looking statements and are subject to numerous risks and uncertainties, including the failure to complete successfully the development of new or enhanced products, the Company s future capital needs, the lack of market demand for any new or enhanced products the Company may develop, any actions by the Company s partners that may be adverse to the Company, the success of competitive products, other economic factors affecting the Company and its markets, and other risks detailed from time to time in the Company s filings with the Securities and Exchange Commission. The actual results may differ materially from those contained in this Form 10-KSB.

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ITEM 7.

FINANCIAL STATEMENTS

The response to this Item is submitted under Item 13.

ITEM 8.

CHANGE IN AND DISAGREEMENTS WITH ACCOUNTANTS ON

ACCOUNTING AND FINANCIAL DISCLOSURE

On November 7, 2003 the registrant accepted the resignation of its prior accountant, Kafoury, Armstrong & Co., as the certifying accountant had not registered with the Public Company Accounting Oversight Board (PCAOB) and was discontinuing its SEC practice.

For each of the past two years the certifying accountant s report on the registrant s financial statements was modified as to an uncertainty. The uncertainty in each of the two years was a substantial doubt about the registrant s ability to continue as a going concern.

The registrant s Board of Directors has approved the change in certifying accountants.

During the registrant s most recent two fiscal years and subsequent interim periods there have been no disagreements between the registrant and its certifying accountant regarding accounting principles or practices, financial statement disclosure, or auditing scope or procedures.

During the registrant s most recent two fiscal years and subsequent interim periods the registrant s certifying accountant has not advised the registrant of any of the matters identified in paragraph (a)(1)(v) of Item 304 of Regulation S-K.

On November 7, 2003 the Cacciamatta Accountancy Corporation of Irvine, California was appointed as the registrant s new certifying accountant. During the two most recent fiscal years, Itronics has not consulted Cacciamatta with respect to either (a) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on Itronics financial statements; or (b) any matter that was either subject of a disagreement (as defined in paragraph 304(a)(1)(iv) or a reportable event (as described in paragraph 304(a)(1)(v) of Item 304 of Regulation S-K).

To the Company's and its management's knowledge, there is no accounting or financial disclosure dispute involving any present or former accountant.

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ITEM 8A CONTROLS AND PROCEDURES

Itronics management, including the Chief Executive and Financial Officer, have conducted an evaluation of the effectiveness of disclosure controls and procedures as of the end of the year ending December 31, 2004 and have evaluated whether any changes in internal controls over financial reporting have occurred during the quarter ended December 31, 2004 that has materially affected, or is reasonably likely to materially affect, the Company s internal

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control over financial reporting. These evaluations were conducted pursuant to Exchange Act Rule 13a-15. Based on these evaluations, the Chief Executive and Financial Officer concluded that the disclosure controls and procedures are effective in ensuring that all material information required to be filed in this annual report has been made known to him in a timely fashion. He also concluded that there were no significant changes in internal controls over financial reporting, or in factors that could significantly affect internal controls over financial reporting, during the quarter ended December 31, 2004.

PART III

ITEM 9.

DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

A. I. <u>Directors and Executive Officers - Summary Information.</u>

The following are the directors and executive officers of the Company:

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<u>Name</u>	12/31/04	<u>Position</u>	Position Held Since
Dr. John W. Whitney	58	President/Treasurer	May 1988

		Director	
Paul H. Durckel	87	Director	September 1995
Howland S. Green	51	Northeast Manager	April 2005
		of GOLD n GRO sales	
		Director	
Gregory S. Skinner	50	Secretary	December 1990
Duane H. Rasmussen	74	Vice President;	November 1997
		Vice President and	May 1994
		General Manager-IMI	

¹⁾ For directors, the term of office is until the next annual meeting of shareholders. For officers, the term of office is until the next annual meeting of the Board of Directors, presently scheduled to be held immediately following the annual meeting of the shareholders.

II. Narrative Information Concerning the Directors and Executive

Officers of the Company.

John W. Whitney:

In addition to being the President and a Director of the Company, 1988 to present, Dr. Whitney is the President and a Director of each of the operating subsidiaries, Itronics Metallurgical, Inc. and Whitney & Whitney, Inc. Dr. Whitney also serves as the General Manager of American Hydromet, a joint venture.

He received his Ph.D. in Mineral Economics from Pennsylvania State University in 1976, his M.S. in Mineralogy from the University of Nebraska in 1971, and his B.S. in Geology from the University of Nebraska in 1970. Dr. Whitney has served as President of Whitney & Whitney, Inc. since its formation in 1977.

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Prior to his serving as W&W full-time president, Dr. Whitney worked as a consultant for the Office of Technology Assessment, U.S. Congress, doing analysis of various Alaskan mineral issues (1977-1978), a consultant for various government agencies, including the office of Mineral Policy Analysis in the U.S. Department of Interior, and the Washington office of the U.S. Bureau of Mines, consulting firms, law firms and mining companies on a variety of mineral planning issues (1976-1977), as a consultant for BKW Associates, Inc. evaluating mining investment opportunities in Mexico and the Philippines (1973-1975), and as a geologist-mineralogist for Humble Oil & Refining Company and GeoTerrex Ltd. (1971-1972).

Dr. Whitney is an internationally recognized consultant in the field of Metal and Material Resource Economics. Dr. Whitney has presented seminars for various clients on Mining Economics, and has taught a three-credit graduate course on International Metal Economics for the University of Arizona's College of Mines. Dr. Whitney is an Honorary Faculty Member of the Academy for Metals and Materials under the seal of the American Society for Metals. Dr. Whitney has made numerous presentations and written a number of publications on various technical

subjects within his broad area of expertise. Dr. Whitney is coinventor of the American Hydromet process technology and holds four patents. Dr Whitney was selected as Nevada s Inventor of the Year for 2000 and became a member of the Inventor s Hall of Fame at the University of Nevada, Reno.

Paul H. Durckel:

Mr. Durckel has served as a Director of the Company since September 1995. He received a pre-legal degree from Stanford University in 1940. He has served various companies involved in fertilizer manufacturing and sales for approximately 30 years. He is presently an Independent Real Estate Salesman for Verus Realty. He served Myers Realty, Inc. in varying capacities, including Broker-Salesman, Consultant, Manager, Vice President of Operations, and Director, from 1987 to 2001. His experience in the fertilizer industry includes Vice President and General Manager and Vice President-Operations for American Plant Food Corp., Executive Assistant to the Chairman for Best Fertilizers Co., Vice President and General Manager for Best Fertilizer of Texas, and Vice President and General Manager for Farm Services Co.

Howland S. Green

Mr. Green was appointed as a director of the Company and as the Northeast Manager of GOLD n GRO Sales in April 2005. He received a B.Sc. degree in plant science and landscape architecture from the University of Rhode Island in 1981. He is the founder, owner and President of Holly Ridge Nursery in Kingston, Rhode Island, and is the concept creator and a founder of the North American Deer Management Network. He has served as consultant to "Ask This Old House". Mr. Green researched and developed the Mirrepel and subsequently co-developed the GOLD n GRO Guardian systemic deer and rabbit repellent. As owner and manager of a landscape construction company and a wholesale nursery for almost thirty years, he has gained extensive knowledge of the landscape construction and maintenance and wholesale and retail nursery markets.

Gregory S. Skinner, Esq.

Mr. Skinner has served as secretary and general counsel of the Company and its subsidiaries since December 1990. He obtained his B.A. degree in Economics from the University of California

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at Berkeley in 1976. He obtained his J.D. degree from Hastings College of the Law, University of California at San Francisco in 1979. He is licensed to practice law in the states of California and Nevada. He retired from the practice of law on January 1, 2003 and is "of counsel" to the law office of Watson & Rounds, a Professional Corporation (WR). Prior to December 31, 2002 he was a shareholder in Skinner, Watson & Rounds, which had offices located in Reno, Las Vegas, and Incline Village, Nevada. Prior to becoming Secretary of Itronics Inc., Mr. Skinner has provided legal services and advice to Whitney & Whitney, Inc. since 1980.

Duane H. Rasmussen:

Mr. Rasmussen has served as Vice President and General Manager of IMI since May 1994. He became Vice President of the Company in November 1997. He initially joined the Company in 1991 as Assistant Manager and Business Consultant for W&W. He received his B.S. degree in Chemical Engineering from the University of Wisconsin in 1953 and his M.B.A. in Industrial Management in 1955 from the same University. He served as President of Screen Printing Systems, Inc. from 1987 to 1990 and from 1995 to October 1998. Other business experience includes approximately 20 years with Jacobs Engineering Group, Inc. in varying capacities, including Project Manager, Regional Sales Manager, Regional Vice President, and Group Vice President.

B. AUDIT COMMITTEE

At present the Company does not have an audit committee and consequently the entire Board serves as the audit committee. The Board presently consists of three members, one of whom is independent. The Company has interviewed several qualified individuals for the position of Audit Committee Financial Expert on the Board of Directors. All have declined to serve, with the primary reason being personal liability issues, especially the perceived view that being the "financial expert" increases the individual s personal exposure over that of being a regular Board member.

C. CODE OF ETHICS

The Board of Directors has adopted a Code of Business Conduct and Ethics (Code) that is applicable to the Company s directors, principal executive and financial officer, principal accounting officer or controller, and persons performing similar functions. A copy of the Code is included in this report as Exhibit 14. A copy of the Code may be obtained by anyone, without charge, by requesting a copy either by telephoning (775) 689-7696 and asking for investor relations or by e-mailing the Company at www:itronics.com. If requesting by e-mail, please indicate a preference of a reply by e-mail or by physical mail.

ITEM 10.

EXECUTIVE COMPENSATION.

Summary of Cash and Certain Other Compensation

The following table sets forth information as to the compensation of the Chief Executive Officer and the four most highly compensated officers whose compensation for the year ended December 31, 2004 exceeded \$100,000:

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				Compensation
Name and				Securities
Principal	Calendar	Annual Compensation		Underlying
Position	<u>Year</u>	<u>Salary</u>	<u>Bonus</u>	Options (#)
Dr. John W. Whitney:	2004	\$126,150	\$-0-	550,000
President, Treasurer	2003	\$126,375	\$-0-	-0-
and Director (1) (2)	2002	\$127,350	\$-0-	3,250,000

Long Term

Duane H. Rasmussen	2004	\$132,000	\$-0-	425,000
Vice President, VP	2003	\$132,000	\$-0-	-0-
and General Manager	2002	\$132,000	\$-0-	-0-
IMI (3)				

(1) The 2004, 2003 and 2002 salary amounts include \$125,000, for each year, respectively, that were not paid currently. In 2003 Dr. Whitney converted \$260,000 of these amounts into the then existing private placement at \$0.08 per share for a total of 3,250,000 shares plus an equal number of three year warrants. This transaction is under the same terms and conditions as for other investors in the current private placement, consequently, the warrants are treated as non-compensatory. These shares have not yet been issued, pending accumulation of sufficient cash to pay required withheld payroll taxes.

Effective January 1, 1999, Dr. Whitney was granted an option for 1,000,000 restricted common shares at \$0.25 per share, effective July 1, 2002 he was granted an option for 3,000,000 restricted common shares at \$0.30 per share, and effective May 7, 2004 he was granted an option for 550,000 restricted common shares at \$0.15 per share. These options are exercisable at any time until one year after Dr. Whitney leaves the employment of the Company. Effective October 2, 2002 Dr. Whitney was granted a five year option for 250,000 restricted common shares at \$0.20 per share.

- (2) The salary amounts listed above include \$1,150, \$1,375, and \$2,350 for 2004, 2003, and 2002, respectively, that represent compensation paid in common stock for service as a director of the Company. The compensation plan for all directors was 2,500 shares per quarter for 2004 and previous years.
- (3) The 2004, 2003, and 2002 salary amounts include \$55,000, \$77,000, and \$132,000, respectively, that were not paid currently. In 2003 Mr. Rasmussen converted \$170,000 of these amounts into the then existing private placement at \$0.08 per share for a total of 2,125,000 shares plus an equal number of three year warrants. This transaction is under the same terms and conditions as for other investors in the current private placement, consequently, the warrants are treated as non-compensatory. These shares have not yet been issued, pending accumulation of sufficient cash to pay required withheld payroll taxes.

Effective May 7, 2004 Mr. Rasmussen was granted a compensatory option for 425,000 restricted common shares at \$0.15 per share. This option is exercisable at any time until one year after Mr. Rasmussen leaves the employment of the Company.

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Option Grants in Last Fiscal Year

:

Number of % of Total

Securities Options to

	Underlying	Employees	Exercise	
	Options	in Fiscal	or Base	Expiration
<u>Name</u>	Granted (1)	Year	<u>Price</u>	<u>Date</u>
Dr. John W. Whitney	550,000	33%	\$0.15	One year after employment ends
Duane H. Rasmussen	425,000	25%	\$0.15	One year after employment ends

(1) In addition to the above, Dr Whitney acquired a total of 1,200,000 non-compensatory three year warrants by converting \$120,000 of short term loans into the then existing private placement. All transactions were under the same terms and conditions as for other investors in current private placements and consequently the warrants are treated as non-compensatory.

Aggregated Option Exercises in Last Fiscal Year and Fiscal Year-End Option

Values

Options Exercised

:

Shares Acquired on

<u>Name</u>	Exercise (#)	Value Realized	
Dr. John W. Whitney			
Non-compensatory (1)	4,750,461	\$ -0-	

(1) Dr. Whitney exercised non-compensatory warrants for 4,750,461 shares by paying cash of \$185,008 and converting short term debt totaling \$195,029. Since the warrants were non-compensatory, no realized value is listed above.

Options Unexercised

:

Number of Securities	Value of Unexercised
Underlying Unexercised	In-the-Money Options
Options at 12/31/04	At 12/31/04

Name	<u>Exercisable</u>	<u>Unexerciseable</u>	<u>Exercisable</u>	<u>Unexerciseable</u>
Dr. John W. Whitney				
Compensatory	4,800,000	-0-	\$ -0- (1)	\$ -0-
Non-compensatory	1,200,000	-0-	\$ -0- (1)	\$ -0-
Duane H. Rasmussen				
Compensatory	425,000	-0-	\$ -0- (2)	\$ -0-
Non-compensatory	2,125,000	-0-	\$ -0- (2)	\$ -0-

(1)If value realized was based on the average of the closing bid and ask prices on December 31, 2004, the value realized would have been \$-0- for the compensatory options and \$-0- for the non-compensatory warrants. The securities under option, common stock of the Company, are restricted under Rule 144 and thus are not tradable within one year of exercise. In addition, as an officer and a greater than 10% shareholder of the Company, Dr. Whitney is further

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restricted by SEC regulations as to the sale of the Company s securities. The actual value realized, if and when the securities are sold, may be more or less than the value listed above. Consequently, the value of the unexercised options is reported at \$-0-.

(2)If value realized was based on the average of the closing bid and ask prices on December 31, 2004, the value realized would have been \$-0- for the compensatory and non-compensatory warrants. The securities under option, common stock of the Company, are restricted under Rule 144 and thus are not tradable within one year of exercise. In addition, as an officer of the Company, Mr. Rasmussen is further restricted by SEC regulations as to the sale of the Company s securities. The actual value realized, if and when the securities are sold, may be more or less than the value listed above. Consequently, the value of the unexercised options is reported at \$-0-.

ITEM 11.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

a) Equity Compensation Plan Information

	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)
Plan Category	<u>(a)</u>	<u>(b)</u>	<u>(c)</u>

Equity compensation plans approved by security holders	-0-	\$-0-	-0-
Equity compensation plans not approved by security holders	5,996,626	\$0.25	989,000
Total	5,996,626	\$0.25	989,000

b) Security Ownership of Certain Beneficial Owners.

The following table sets forth certain data with respect to those persons known to the Company, as of March 31, 2005, to be the beneficial owners of more than 5% of the outstanding shares of common stock of the Company:

Amount and Nature of Beneficial Ownership

Common Shares

Name and		Which May Be		Percent
Address of	Common Shares	Acquired Within		of
Beneficial Owner	Presently Held	<u>60 days</u>	<u>Total</u>	<u>Class</u>
John W. Whitney				
P.O. Box 10725				
Reno, NV 89510				
(1) (2) (3) (4)	29,399,530	6,000,000	35,399,530	17.3
		40		

⁽¹⁾ Director

- (2) Officer
- (3) Includes 72,768 shares owned by Maureen E. Whitney, Dr. Whitney's wife.
- (4) Dr. Whitney s options include compensatory options of 1,000,000 shares at \$0.25 per share, 3,000,000 shares at \$0.30 per share, 250,000 shares at \$0.20 per share, and 550,000 shares at \$0.15 per share. Dr. Whitney also has non-compensatory three year warrants for 1,200,000 shares at \$0.075, \$0.15, and \$0.225 per share for the first through third years of the option period. He received these warrants by converting \$120,000 in short term loans into the then existing private placement under the same terms and conditions as other investors.

c) Security Ownership of Management.

The following table sets forth as of March 31, 2005, certain information, with respect to director and executive officer ownership of common stock in the Company:

Amount and Nature of Beneficial Ownership

		Common Shares		Percent
Name and		Which May Be		of
Address of	Common Shares	Acquired Within		Class
Beneficial Owner	Presently Held	60 days(1)	<u>Total</u>	<u>(2)</u>
Dr. John W. Whitney				
P.O. Box 10725				
Reno, NV 89510 (3)(4)(5)	29,399,530	6,000,000	35,399,530	17.3
Paul H. Durckel				
1655 Highway 395				
Minden, NV 89423 (3)	574,668	138,400	713,068	.4
Duane H. Rasmussen				
P.O. Box 10725				
Reno, NV 89510 (4)	4,364,011	2,550,000	6,914,011	3.4
All directors and				
executive officers as				
a group (4 persons)	34,990,528	8,688,400	43,678,928	21.1

⁽¹⁾ Dr. Whitney s options include compensatory options of 1,000,000 shares at \$0.25 per share, 3,000,000 shares at \$0.30 per share, 250,000 shares at \$0.20 per share, and 550,000 shares at \$0.15 per share. Dr. Whitney also has non-compensatory three year warrants for 1,200,000 shares at \$0.075, \$0.15, and \$0.225 per share for the first through third years of the option period. He received these warrants by converting \$120,000 in short term loans into the then existing private placement under the same terms and conditions as other investors.

Mr. Durckel has three year warrants to acquire 138,400 restricted common shares related to his

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cash investment in the 2002 and 2003 Equity Private Placements, which are convertible at \$0.08, \$0.16, and \$0.24 per share for the first through third years of the option period.

Mr. Rasmussen has a three year non-compensatory warrant to acquire 2,125,000 shares at \$0.08, \$0.16, and \$0.24 per share for the first through third years of the option period. He acquired this warrant by investing \$170,000 of his back salary in the existing private placement. Mr. Rasmussen also was granted a compensatory option to acquire 425,000 restricted common shares at \$0.15 per share. This option is exercisable at any time until one year after Mr. Rasmussen leaves the employment of the Company.

- (2) The percent of class is based on the sum of 198,389,068 shares outstanding or to be issued as of March 31, 2005 plus, for each individual, the number of common shares as to which the named individual has the right to acquire beneficial ownership within 60 days of March 31, 2005.
- (3) Director
- (4) Officer
- (5) Includes 72,768 shares owned by Maureen E. Whitney, Dr. Whitney's wife.

c) Changes in Control

The Company is not aware of any arrangement which at some later date results in changes in control of the Company.

ITEM 12.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

After approval from the Company's Board of Directors, in March 1999 the Company's subsidiary, WWI, agreed to provide technical services to Golden Phoenix Minerals, Inc. (GPXM), a junior mine exploration and development company whose common shares trade on the OTC Bulletin Board. Services were billed monthly and WWI received a combination of GPXM common stock, SEC Rule 144 restricted common stock, and cash. Separately, Dr. Whitney personally agreed to acquire up to 10,000,000 common shares of GPXM at \$0.10 per share, making him beneficial owner of more than ten percent of GPXM. Any unexercised options under this arrangement can be assigned to WWI. Dr. Whitney is a principal in a group that controls the mining claims underlying one of GPXM's principal exploration and development properties. At December 31, 2004 WWI owned 123,198 restricted GPXM shares. At December 31, 2003 WWI owned 736,442 restricted GPXM shares. The initial Rule 144 one year period for resale began in April 2000, and continues monthly thereafter. Total revenue from GPXM for 2004 and 2003 was \$224,039 and \$146,893, respectively. A total of \$101,281 and \$13,707 is included in accounts receivable at December 31, 2004 and 2003, respectively. At December 31, 2004, the average bid/asked price for GPXM common was \$0.213, resulting in a value of shares held on that date of \$26,180. Included in the GPXM shares held at December 31, 2003 and 2002 are 300,000 and 1,050,000 restricted common shares, respectively, that were acquired by WWI purchasing \$0.10 options from Dr. Whitney and

subsequently exercising the options by offsetting accounts receivable due it from GPXM. The purchase price of the options was \$109,275, which was determined at 85% of fair market value of the then current trading price of GPXM, less the \$0.10 option price. This valuation method is under the same terms that WWI uses to accept GPXM restricted common shares for its monthly services. Dr. Whitney accepted Company restricted common shares in the 2002 Equity Private Placement as payment for the options, which amounted to 1,365,938 shares plus an equal number of warrants with conversion prices ranging from \$0.08 to \$0.24 per share. The total cost to WWI of these GPXM shares was \$214,275 and the market value at December 31, 2002 was \$241,500. The 300,000 shares held at December 31, 2003 were valued at \$135,750 and had a cost of \$70,650.

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<u>ITEM 13.</u>

FINANCIAL STATEMENTS, EXHIBITS AND REPORTS ON FORM 8-K.

I. Index of Financial Statements and Exhibits

1. <u>Index of Financial Statements:</u>	Page No.
INDEPENDENT AUDITOR S REPORT ON THE FINANCIAL STATEMENTS	44
Consolidated Balance Sheets as of December 31, 2004 and 2003	45
Consolidated Statements of Operations and Comprehensive	
Income for the Years ended December 31, 2004 and 2003	47
Consolidated Statements of Stockholders' Equity (Deficit)	
for the Years ended December 31, 2004 and 2003	48
Consolidated Statements of Cash Flows for the Years ended	
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14 Code of Business Conduct and Ethics	78
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31 Rule 15d-14(a) Certification	80
32 Section 1350 Certification	81

II. Reports on Form 8-K.

The following forms 8-K were filed during the fourth quarter of 2004:

October 7, 2004 Announced GOLD in GRO fertilizer sales for the three and nine months ended September 30, 2004.

November 19, 2004 Announced sales and operating results for the three and nine months ended September 30, 2004.

December 2, 2004 Announced development of a subscription based internet publication featuring gold industry and gold company profiles.

STATEMENTS AND SCHEDULES

Schedules not included are omitted for the reason that they are not applicable or not required.

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CACCIAMATTA ACCOUNTANCY CORPORATION CERTIFIED PUBLIC ACCOUNTANTS

The Board of Directors and Stockholders of Itronics Inc.

We have audited the accompanying consolidated balance sheet of Itronics Inc. (a Texas corporation) and subsidiaries as of December 31, 2004 and 2003, and the related consolidated statements of operations and comprehensive income, stockholders' equity (deficit), and cash flows for the years then ended. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to in the first paragraph present fairly, in all material respects, the consolidated financial position of Itronics Inc. and subsidiaries as of December 31, 2004 and 2003, and the results of their operations and their cash flows for the years then ended in conformity with U.S. generally accepted accounting principles.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As of December 31, 2004, the Company has an accumulated deficit of \$22,944,959, a negative working capital of \$3,215,298, and a stockholders deficit balance of \$2,564,270. The Company s ability to continue as a going concern is contingent upon (a) future profitable operations and (b) the ability to generate sufficient cash to meet obligations as they become due. These conditions raise substantial doubt about the Company s ability to continue as a going concern. Management's plans regarding this matter are described in Note 13. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/S/ Cacciamatta Accountancy Corporation

Irvine, California

May 19, 2005

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ITRONICS INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

DECEMBER 31, 2004 AND 2003

ASSETS

	<u>2004</u>	<u>2003</u>
CURRENT ASSETS		
Cash	\$ 5,180	\$ 34,499
Accounts receivable, less allowance for		
doubtful accounts, 2004, \$5,700;		
2003, \$5,700	188,805	96,384
Marketable securities, available for sale	26,180	413,240
Inventories	571,704	425,525
Prepaid expenses	142,509	53,073
Current portion of deferred loan fees	14,152	40,773
Total Current Assets	948,530	1,063,494

PROPERTY AND EQUIPMENT		
Land	215,000	215,000
Building and improvements	1,167,315	1,167,315
Design and construction in progress,		
manufacturing facility	121,171	102,203
Equipment and furniture	2,071,998	1,861,917
Vehicles	133,028	133,028
Equipment under capital lease	1,096,104	1,076,687
	4,804,616	4,556,150
Less: Accumulated depreciation and amortization	1,670,668	1,383,307
	3,133,948	3,172,843
OTHER ASSETS		
Intangibles less accumulated amortization 2004, \$26,011;		
2003, \$25,963	8,435	8,483
Marketable securities, available for sale	-	120,000
Deferred loan fees, less current portion, less accumulated		
amortization 2004, \$203,288; 2003, \$162,056	34,502	49,113
Deposits	22,525	26,575
	65,462	204,171
	\$4,147,940	\$4,440,508
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LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)

<u>2003</u>

<u>2004</u>

CURRENT LIABILITIES

Accounts payable	\$ 609,795	\$ 517,989
Accrued management salaries	389,127	218,185
Accrued expenses	398,731	213,295
Insurance contracts payable	15,048	9,458
Interest payable	211,216	217,604
Current maturities of long-term debt	522,845	537,031
Current maturities of capital lease obligations	807,746	994,456
Current maturities of advances from stockholders	161,525	248,168
Current maturities of capital lease due stockholder	5,420	4,869
Current maturities of convertible notes and accrued interest	1,020,946	1,686,286
Other	21,429	27,056
Total Current Liabilities	4,163,828	4,674,397
LONG-TERM LIABILITIES		
Long-term debt, less current maturities	97,022	123,059
Convertible promissory notes	1,517,000	2,376,100
Accrued interest, convertible notes	925,216	879,126
Capital lease obligations, less current maturities	-	75,391
Capital lease due stockholder, less current maturities	9,144	14,117
Total Long-Term Liabilities	2,548,382	3,467,793
Commitments and Contingencies	-	-
	6,712,210	8,142,190

STOCKHOLDERS' EQUITY (DEFICIT)

Preferred stock, par value \$0.001 per share; authorized 999,500 shares; issued and outstanding 2004, 0 shares; 2003, 0 shares Common stock, par value \$0.001 per share; authorized 250,000,000 shares; issued and outstanding 2004, 164,863,938; 2003, 122,373,953 164,864 122,374 Additional paid-in capital 19,438,213 15,234,212 Accumulated deficit (22,944,959)(20,105,087)Common stock to be issued 786,426 672,255 Accumulated other comprehensive income (9,568)374,346 Common stock options outstanding, net 754 218 (2,564,270)(3,701,682)\$4,147,940 \$4,440,508

The accompanying notes are an integral part of these financial statements.

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ITRONICS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003

	<u>2004</u>	<u>2003</u>
REVENUES		
Fertilizer	\$1,019,789	\$ 554,320
Photochemical recycling	301,609	327,306
Silver	101,531	55,287
Mining technical services	297,120	331,874

Total Revenues	1,720,049	1,268,787
COST OF SALES	1,687,753	1,428,640
Gross Profit (Loss)	32,296	(159,853)
OPERATING EXPENSES		
Depreciation and amortization	325,404	336,738
Research and development	165,083	69,353
Sales and marketing	971,988	739,043
Delivery and warehousing	78,565	47,211
General and administrative	897,882	841,747
	2,438,922	2,034,092
Operating (Loss)	(2,406,626)	(2,193,945)
OTHER INCOME (EXPENSE)		
OTHER INCOME (EXPENSE) Interest	(790,027)	(965,071)
	(790,027) 168,937	(965,071) 449,606
Interest		
Interest Gain on sale of investments	168,937	449,606
Interest Gain on sale of investments Other	168,937 187,844	449,606 (42,881)
Interest Gain on sale of investments Other Total Other Income (Expense)	168,937 187,844 (433,246)	449,606 (42,881) (558,346)
Interest Gain on sale of investments Other Total Other Income (Expense) (Loss) before provision for income tax	168,937 187,844 (433,246)	449,606 (42,881) (558,346)
Interest Gain on sale of investments Other Total Other Income (Expense) (Loss) before provision for income tax Provision for income tax	168,937 187,844 (433,246) (2,839,872)	449,606 (42,881) (558,346) (2,752,291)
Interest Gain on sale of investments Other Total Other Income (Expense) (Loss) before provision for income tax Provision for income tax Net Income(Loss)	168,937 187,844 (433,246) (2,839,872)	449,606 (42,881) (558,346) (2,752,291)

Weighted average number of shares outstanding,

basic and diluted $141,941,235 \qquad 103,994,400$ Earnings (Loss) per share, basic and diluted $\$(0.020) \qquad \(0.026)

The accompanying notes are an integral part of these financial statements.

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ITRONICS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (DEFICIT)

FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003

	COMMON STOCK		ACCUMULATED			
	NUMBER OF		ADDITIONAL	ADDITIONAL COMP		OTHER
	SHARES		PAID-IN	ACCUMULATED	STOCK TO	COMPREHENSIVE
	(1,000_s)	AMOUNT	CAPITAL	<u>DEFICIT</u>	<u>BE</u> ISSUED	<u>INCOME</u>
Balance, Dec. 31, 2002	88,690	\$ 88,690	\$11,748,423	\$(17,352,796)	\$ 576,998	\$241,653
Issue of common stock:						
For cash	12,583	12,583	1,011,287	-	(15,000)	-
For services	7,808	7,808	891,576	-	233,395	-
For debt conversion	11,627	11,627	1,434,817	-	(13,863)	-
For asset acquisition	1,666	1,666	148,109	-	(109,275)	-
Net (loss) for the year						
ended Dec. 31, 2003	-	-	-	(2,752,291)	-	-

Other comprehensive						
income for the year						
ended Dec. 31, 2003	-	-	-	-	-	132,693
Common stock options						
outstanding	-	-	-	-	-	-
Balance, Dec. 31, 2003	122,374	122,374	15,234,212	(20,105,087)	672,255	374,346
Issue of common stock						
For cash	12,983	12,983	1,095,018	-	(27,500)	-
For services	8,935	8,935	793,618	-	(16,292)	-
For debt conversion	18,311	18,311	2,128,152	-	157,963	-
For asset acquisition	2,261	2,261	187,213	-	-	-
Net (loss) for the year						
ended Dec. 31, 2004	-	-	-	(2,839,872)	-	-
Other comprehensive						
income for the year						
ended Dec. 31, 2004	-	-	-	-	-	(383,914)
Common stock options						
outstanding	-	-	-	-	-	-
Balance, Dec. 31, 2004	164,864	\$164,864	\$19,438,213	\$(22,944,959)	\$786,426	\$ (9,568)

The accompanying notes are an integral part of these financial statements

ITRONICS INC, AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003

	<u>2004</u>	<u>2003</u>
Cash flows from operating activities		
Net income (loss)	\$(2,839,872)	\$(2,752,291)
Adjustments to reconcile net loss to		
cash used by operating activities:		
Depreciation and amortization	325,404	336,738
Interest on convertible notes	483,868	606,754
Marketable securities received for services	(35,748)	(53,050)
Gains on investments	(168,937)	(449,604)
Gain on debt forgiveness	(187,814)	-
Other	-	20,395
Stock option compensation	536	(108,955)
Expenses paid with issuance of common stock:		
Interest expense	94,299	109,362
Consulting expenses	281,643	225,976
Directors fees	3,450	4,125
Salaries	297,536	448,624
Operating expenses	5,000	76,492
(Increase) decrease in:		
Trade accounts receivable	(92,421)	(8,160)
Inventories	(146,179)	(88,372)
Prepaid expenses, deposits and other	14,896	(20,415)

Increase (d	decrease)	in:
-------------	-----------	-----

Accounts payable	105,762	(12,593)
Accrued management salaries	170,942	39,157
Accrued expenses and contracts payable	269,785	(720)
Net cash used by operating activities	(1,417,850)	(1,626,537)
Cash flows from investing activities:		
Acquisition of property and equipment	(56,756)	(47,837)
Acquisition of investments	-	(9,000)
Sale of investments	356,107	786,381
Net cash provided (used) by investing activities	299,351	729,544
Cash flows from financing activities:		
Proceeds from sale of stock	1,080,501	1,008,870
Proceeds from stockholders/short-term debt	150,000	-
Account receivable factoring, net	13,224	38,005
Payments on debt	(154,545)	(172,584)
Net cash provided by financing activities	1,089,180	874,291
Net increase (decrease) in cash	(29,319)	(22,702)
Cash, beginning of year	34,499	57,201
Cash, end of year	\$ 5,180	\$ 34,499
The eccompanying notes are an integral part of these	financial statements	

The accompanying notes are an integral part of these financial statements.

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ITRONICS INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

FOR THE YEARS ENDED DECEMBER 31, 2004 AND 2003

(continued)

	<u>2004</u>	<u>2003</u>
Supplemental Disclosures of Cash Flow		
Information:		
Cash paid during the period for interest	\$158,587	\$ 164,423
Schedule of non-cash financing transactions:		
Settlement of debt/accruals by		
issuance of common stock:		
Accounts payable	27,178	118,194
Accrued management salaries	-	162,250
Convertible notes and accrued interest	1,962,219	1,420,471
Short-term debt and accrued interest due an		
officer/stockholder	315,029	12,110
Equipment financed with capital leases	2,236	31,008
Acquisition of assets by issuance of		
common stock:		
Minority interest in American Gold & Silver Ltd.	-	40,500
Equipment	189,474	-
Officer/stockholder loan of marketable securities	28,276	-
Payment of short-term debt due an officer/		
stockholder with marketable securities	-	55,275

The accompanying notes are an integral part of these financial statements.

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

NOTE 1 - Summary of Significant Accounting Policies:

Company's Activities:

Itronics Inc., through its subsidiaries, (the Company) is involved in mining technical services, photochemical recycling and related silver recovery, and liquid fertilizer manufacturing.

Financial Statement Estimates and Assumptions:

The preparation of financial statements in conformity with accounting principles generally accepted in the U.S. requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities

and disclosure of contingent assets and liabilities at the date of the

financial statements and reported amounts of revenues and expenses during

the reporting period. Actual results could differ from those estimates.

Principles of Consolidation:

The consolidated financial statements include the accounts of

Itronics Inc. and its subsidiaries:

	2004	2003
	<u>PERCENTAGE</u>	PERCENTAGE
Whitney & Whitney, Inc.	100.00	100.00
Itronics Metallurgical, Inc.	100.00	100.00
Itronics California, Inc.	100.00	100.00
Nevada Hydrometallurgical Project (A Partnership)	92.50	92.50
American Hydromet (A Joint Venture)	82.53	82.53
American Gold & Silver (A Limited Partnership)	47.77	47.77

Whitney & Whitney, Inc. is the general partner for American Gold & Silver. As such, the Company has control over American Gold & Silver and has included it in its consolidation.

American Gold & Silver and Nevada Hydrometallurgical Project possess no material tangible assets or liabilities.

No amount for minority interests is reflected in the consolidated balance sheets as the equity of minority interests in the net losses exceed the carrying value of the minority interests.

No amount for minority interests is reflected in the consolidated statement of operations since losses applicable to the minority interest in each subsidiary exceed the minority interest in the equity capital of each subsidiary. As a result, losses applicable to the minority interest are charged against the majority interest. When future earnings materialize, the majority interest will be credited to the extent of such losses previously absorbed.

All significant intercompany accounts and transactions have been eliminated in the consolidation.

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

Revenue Accounting:

Revenue from sales of products are recorded when shipped. Product returns and allowances are nominal.

When the mining technical services segment of the Company is responsible for the procurement of materials and equipment, property, or subcontracts in its consulting business, it includes such amounts in both revenues and cost of sales. The amount of such pass-through costs included in both mining consulting revenues and cost of sales for the year ended December 31, 2004 and 2003 were \$108,254 and \$118,735, respectively.

Cash and Cash Equivalents:

At present, cash includes only deposits in checking and money market accounts and does not include any cash equivalents.

Accounts Receivable Allowance Account:

The Company uses the allowance method to account for uncollectible accounts receivable.

Inventories:

Inventory is determined utilizing the lower of cost or market value determined on the average cost valuation method and consists primarily of unprocessed silver bearing photochemicals, fertilizer raw materials and saleable fertilizer.

Following is a summary of finished goods, work in progress, and raw materials inventories as of December 31, 2004 and 2003:

	<u>2004</u>	<u>2003</u>
Finished goods	\$ 63,615	\$ 60,553
Work in progress	-	15,150
Raw materials	508,089	349,822

\$571,704 \$425,525

Cost of the silver in solution inventory is the lesser of the actual cost, or 80% of the fair market value of the silver content of the photochemicals as determined by laboratory assays (See Note 14).

Property and Equipment:

Property and equipment are stated at cost. Depreciation is computed by accelerated and straight-line methods over five to forty years. Capital lease equipment is amortized using accelerated and straight-line methods over five to twenty years. Accumulated amortization on capital lease equipment is \$474,340 and \$376,996 at December 31, 2004 and 2003, respectively.

Repairs and maintenance are charged to operations as incurred.

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

Intangible Assets:

Intangible assets are amortized by the straight-line method over the

following lives:

	<u>YEARS</u>
Patents	17
Deferred loan fees	3-5

Estimated aggregate amortization expense for the succeeding five years is:

2005	\$14,244
2006	3,949
2007	3,255
2008	3,255
2009	3,255

Research and Development:

Wages, benefits, rent, and other costs associated with ongoing research are expensed as research and development when incurred.

Advertising:

The Company advertises its products in various trade publications and general newspaper supplements. It also promotes the Company in various business publications, television, and internet media. Such advertising costs include the creative process, costs of production, and placement costs of the ads themselves. All advertising costs are expensed as incurred. Total advertising expense was \$157,986 and \$32,960 for the years ended December 31, 2004 and 2003, respectively.

Income Taxes:

The Company has accounted for income taxes to conform to the requirements of Statements of Financial Accounting Standards (SFAS) No. 109, Accounting for Income Taxes. Under the provisions of SFAS 109, an entity recognizes deferred tax assets and liabilities for future tax consequences of events that have already been recognized in the Company's financial statements or tax returns. The measurement of deferred tax assets and liabilities is based on provisions of the enacted tax law. The effects of future changes in tax laws or rates are not anticipated. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

Loss per Common Share:

Loss per common share is calculated based on the consolidated net loss for the period divided by the weighted average number of common shares outstanding during 2004 and 2003. Common stock equivalents are not included, as their effect would be antidilutive.

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

Common Stock:

The Company s common shares have, subject to the provisions of any

series of Preferred Stock, certain rights including one vote per share on a non-cumulative basis and a ratable portion of any dividends that may be declared by the Board of Directors. The Company may from time to time issue common shares that are restricted under Rule 144 of the Securities and Exchange Commission. Such restrictions require the shareholder to hold the shares for a minimum of one year before sale. In addition, officers, directors and more than 10% shareholders are further restricted in their ability to sell such shares.

NOTE 2 - Reclassification:

The prior year's financial statements have been reclassified, where necessary, to conform with the current year presentation.

NOTE 3 - Long-Term Debt:

Long-term debt at December 31, 2004 and 2003 is comprised of the following (all debt payments are applied to outstanding interest owed at date of payment prior to being applied to the principal balance). The carrying amount approximates fair value. The fair value of long-term debt is based on current rates at which the Company could borrow funds with similar remaining maturities.

	DECEMBER 31,	
	<u>2004</u>	<u>2003</u>
Notes due to unrelated parties:		
Notes payable secured by vehicles due at varying dates		
through 2006. The monthly payments total \$1,345,		
including interest at 10.5% to 11.0% per annum.	\$ 17,440	\$ 33,584
Note payable secured by real property due May 2016.		
Monthly payment is \$6,601, including interest		
at 12% per annum.	492,881	510,218
Financing contract secured by equipment due May 2006.		
Monthly payment is \$806, including interest at 17.99%	14,589	18,585
City of Reno Special Assessment District for road		
and access improvements. Payable in 40 equal semi-		
annual payments plus interest at 6% percent per annum.	94,957	97,703
Less current portion due within one year	(522,845)	(537,031)

Total long-term liabilities due to unrelated parties

\$ 97,022

\$ 123,059

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

DECEMBER 31,

<u>2004</u>

2003

Convertible Promissory Notes:

Three year convertible promissory notes due

November 2005 through February 2006, including

interest at 12% per annum. The notes and accrued

interest are convertible into the Company's

restricted common stock at \$0.15 per share at

any time through November 18, 2005 and

February 16, 2006.

\$ 47,000

\$47,000

Three year convertible promissory notes due at varying dates through February 2006, including interest at 9% to 12% per annum. The notes and accrued interest are convertible into the Company s restricted common stock at prices ranging from \$0.125 to \$1.18 per share at any

1,570,000

1,645,000

time through February 2006.

cime chrough redructy 2000.	1,570,000	1,043,000
Three year convertible promissory notes due at		
varying dates through December 2004, including		
interest at 12% per annum. The notes and accrued		
interest are convertible into the Company s		
restricted common stock at prices ranging from		
\$0.10 to \$0.15 per share at any time through		
dates ranging from March to December 2004.	20,000	1,185,000
Three year convertible promissory notes due at		
varying dates through September 2005, including		
interest at 12% per annum. The notes and accrued		
interest are convertible into the Company s		
restricted common stock at prices ranging from		
\$0.10 to \$0.25 per share at any time through		
dates ranging from January to September 2005.	606,100	774,100
Accrued interest on convertible promissory notes	1,220,062	1,290,412
Less current portion due within one year	(1,020,946)	(1,686,286)
Total Long Term Convertible Promissory Notes		
and Accrued Interest	\$2,442,216	\$3,255,226
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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

DECEMBER 31,

	<u>2004</u>	<u>2003</u>
Loans from Stockholders/Related Transactions:		
Advances from officer/stockholder. Due on demand,		
with interest accruing at 12% per annum.	\$161,525	\$ 248,168
	161,525	248,168
Less current portion due within one year	(161,525)	(248,168)
Total long-term liabilities due to stockholders	\$ -	\$ -

Long-term debt matures as follows:

	UNRELATED	CONVERTIBLE	
<u>YEAR</u>	<u>PARTIES</u>	<u>NOTES</u>	STOCKHOLDERS
2005	\$522,845	\$1,020,946	\$161,525
2006	8,023	2,442,216	-
2007	3,276	-	-
2008	3,475	-	-
2009	3,687	-	-
2010-2023	78,561	-	-
	\$619,867	\$3,463,162	\$161,525

As discussed in Note 15, property taxes on the Company s manufacturing facility are delinquent as of December 31, 2004 in the amount of \$7,336 plus penalties and interest. Such delinquency in property tax payments is a default under terms of the deed of trust securing the mortgage on the property and the lender can demand payment in full and institute foreclosure proceedings. As required by U.S. Generally Accepted Accounting Principles, the entire principal balance of the note, amounting to \$492,881 as of December 31, 2004, is included in current liabilities. The lender is

aware of the situation and has not made a demand or taken any other action. In addition a financing contract on equipment, with a balance of \$14,589, is in default and is included in current liabilities. The lender has referred the loan to an attorney, but no further action has been taken.

During 2003 the holders of the 2000 Series Convertible Promissory Notes were offered to extend the notes for three years in exchange for an increased interest rate to 12% and a reduction in conversion price to \$0.125 per share. As of December 31, 2004 all but \$80,000 of the notes and \$44,475 of the accrued interest were extended. The un-extended notes and accrued interest are in default, but no action has been taken by the note holders.

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

NOTE 4 - Major Customers:

Fertilizer sales for the years ended December 31, 2004 and 2003 include \$989,084 and \$518,202, respectively, from one major customer, which represents 97% and 93%, respectively, of fertilizer sales for the years ended December 31, 2004 and 2003. Receivables from this major customer as of December 31, 2004 amounted to \$58,094, which represents 77% of photochemical fertilizer accounts receivable. The customer is one of the largest fertilizer distribution companies in the country.

Photochemical recycling revenues for the year ended December 31, 2004 and 2003, respectively, include \$-0- and \$80,900 from one major customer under a Department of Defense contract. Photochemical recycling and silver refining revenues for the years ended December 31, 2004 and 2003 also include \$201,291 and \$116,693, respectively, from one major customer in the digital imaging and processing industry. The combined revenues from the one major customer represents 59% of 2004 photochemical recycling and silver refining revenues and the combined revenues for the two major customers was 60% of photochemical recycling and silver refining revenues for 2003.

Sales of silver bars, film, and processed bullion for the year ended December 31, 2004 includes \$47,456 to three customers, which is 75% of such sales. Comparable sales for the year ended December 31, 2003 include \$15,726 to two customers, which is 57% of such sales.

Technical services revenue (including pass through funds described in Note 1) for the year ended December 31, 2004 includes \$224,039 and \$32,816 from two major customers which represents 86% of technical services revenues. Technical services revenue (including pass through funds described in Note 1) for the year ended December 31, 2003 includes \$146,893, \$131,600, and \$45,830 from three major customers which represents 98% of technical services revenues. Receivables from these major customers as of December 31, 2004 and 2003 amount to \$101,281 and \$21,210, which represents 85% and 73%, respectively, of consulting accounts receivable.

The Company's major technical services customers operate within the mining industry, both nationally and internationally. Due to the nature of the Company's operations, the major sources of revenues may change from year to year.

NOTE 5 - Income Taxes:

The following is a reconciliation of the federal statutory tax and tax rate to the Company's provision for taxes and its effective tax rate.

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

	<u>20</u>	<u>04</u>	<u>20</u>	003
		PERCENT		PERCENT
		OF PRE-TAX		OF PRE-TAX
	<u>AMOUNT</u>	INCOME	<u>AMOUNT</u>	INCOME
Federal tax at statutory rate	\$ -	- %	\$ -	- %
Temporary differences,				
primarily bad debt and				
compensation related expenses	-	- %	-	- %
Non-deductible expenses	-	- %	-	- %
Utilization of NOL	-	- %	-	- %
Total Income Tax Expense	\$ -	0.0%	\$ -	0.0%

The Company's consolidated net operating loss available for carry-forward to offset future taxable income and tax liabilities for income tax reporting purposes expire as follows:

Net Operating

Year Ending December 31: Loss

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2005	\$ 65,11	13
2006	430,40)3
2007	188,14	16
2008	113,25	53
2012	322,52	25
2018	377,94	14
2019	1,605,95	54
2020	3,254,37	75
2021	2,933,60)7
2022	2,496,74	14
2023	2,286,43	36
2024	2,208,74	10
	\$16,283,24	10

The Company's total deferred tax assets, and deferred tax asset valuation allowances at December 31, 2004 and 2003 are as follows:

	<u>2004</u>	<u>2003</u>
Total deferred tax assets	\$ 5,682,993	\$ 4,776,751
Less valuation allowance	(5,682,993)	(4,776,751)
Net deferred tax asset	\$ _	\$ _

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ITRONICS INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS DECEMBER 31, 2004 AND 2003

NOTE 6 - Stock Option and Purchase Plans:

In January 2000 the Company began a private placement of three year convertible notes to raise \$2.5 million. The placement was completed in February 2000 and raised a total of \$2,668,000. The notes and accrued interest are convertible to restricted Common Shares at varying dates through February 2006, with conversion prices ranging from \$0.125 to \$1.18. During 2003 the holders of these notes were offered to extend the notes for three years in exchange for an increased interest rate from 9% to 12% and a reduction in conversion price to \$0.125 per share. All but \$90,000 of the notes were extended. \$75,000 in principal and \$34,434 in accrued interest were converted to restricted common stock during 2004. \$928,000 in principal and \$340,450 in accrued interest were converted to restricted common stock during 2003.

In October 2000 the Company completed the registration of 10,000,000 common shares in connection with its agreement with Swartz Private Equity, LLC. (Swartz) to raise \$15 million over three years. As part of the agreement, Swartz received a five year warrant for 2,400,000 shares at \$0.55 per share and it received five year warrants for 331,033 shares based on the exercise of the Company s put rights during 2001. The exercise price of these warrants range from \$0.0825 to \$0.308, but are subject to downward reset provisions. In February 2002 the agreement with Swartz was renegotiated and as part of the new agreement, Swartz was granted a five year warrant for 360,000 shares at an exercise price of \$0.238.

In March 2001 the Company began a private placement of three year convertible notes. A total of \$1,242,029 was raised in 2001. The notes and accrued interest at 12% compounded annually are convertible to restricted common shares at varying dates through December 2004, with conversion prices ranging from \$0.10 to \$0.15. \$1,165,000 in principal and \$471,492 in accrued interest were converted to restricted common stock during 2004. \$57,029 in principal and \$14,551 in accrued interest were converted to restricted common stock during 2003.

In January 2002 the Company began a private placement of three year convertible notes. A total of \$844,100 was raised in 2002. The notes and accrued interest at 12% compounded annually are convertible to restricted common shares at varying dates through September 2005, with conversion prices ranging from \$0.10 to \$0.25. \$168,000 in principal and \$48,294 in accrued interest were converted to restricted common stock during 2004. \$70,000 in principal and \$10,442 in accrued interest were converted to restricted common stock during 2003.

In November 2002 the Company began a private placement of restricted common stock with an equal number of attached warrants. A total of \$117,500 at \$0.08 per share was raised in 2002. The warrants are for three years and are convertible into restricted common stock at \$0.08 for the first year, \$0.16 for the second year, and \$0.24 for the third year.

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

During 2003 the Company continued the private placement of restricted common stock with an equal number of attached warrants. A total of \$703,500 at \$0.08 per share was raised in 2003. The warrants are for three years and are convertible into restricted common stock at \$0.08 during the first year, \$0.16 during the second year, and \$0.24 during the third year.

During 2003 three officer/employee/stockholders converted salary in arrears totaling \$480,000, or a total of 6,000,000 restricted common shares, into the \$0.08 per share private placement described above under the same terms and conditions, including an equal number of attached warrants, as described above. Of this amount, \$317,500 was for salary previously converted to restricted common stock, but not issued to conserve the cash required to pay payroll taxes, and \$162,500 was additional salary in arrears converted into restricted common stock. The shares remain un-issued as of the date of this report to conserve cash. Also during 2003 an officer/stockholder converted a total of \$12,037 in short term debt and accrued interest into the private placement with the same terms and conditions as described above.

During 2004 the Company continued the private placement of restricted common stock with an equal number of attached warrants. Through May 2004 a total of \$646,000 at prices ranging from \$0.08 to \$0.125 per share was raised. The warrants, totaling 3,924,500 shares, are for three years and are convertible into restricted common stock at prices ranging from \$0.08 to \$0.125 during the first year of the warrant period, double the respective amounts during the second year, and triple the respective amounts during the third year. In December 2004 a new private placement of restricted common shares was begun with an attached three year warrant for one half the number of shares acquired in the private placement. A total of \$197,500 was raised in 2004 at \$0.05 per share, which resulted in the issuance of warrants to acquire 1,975,000 restricted common shares. The exercise price of these warrants is \$0.075 during the first year of the warrant period, double that amount during the second year, and triple that amount during the third year. In addition, an officer/stockholder converted \$120,000 in loans to the Company into the private placement and received warrants to acquire 1,200,000 restricted common shares under the same terms and conditions as the other investors in the private placement.

The Company periodically grants compensatory options and warrants to acquire common shares to certain officers, directors, employees, and consultants of the Company. The options are exercisable at varying dates through 2014, except for 5,600,000 options granted to various officers and employees, which expire one year after the end of their employment. The number of outstanding compensatory options and warrants was 5,996,626 and 4,409,591 shares at December 31, 2004 and 2003, respectively, at prices ranging from \$0.15 to \$0.90.

Following is a summary of all warrant and option activity for the years ended December 31, 2004 and 2003.

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

NUMBER OF SHARES 2004 2003 Under option, beginning of year 60,907,607 35,618,794 Granted 12,558,586 39,125,973 Exercised (21,484,760) (13,483,260)

Expired	(87,965)	(353,900)
Under option, end of year	51,893,468	60,907,607
Average price for all options granted and exercised	\$0.11	\$0.12

-

Compensatory Stock Options:

Included in the above options and warrants are compensatory options granted to various employees and consultants during 2004 and 2003 to acquire 1,675,000 and 14,000 common shares, respectively. Of the options for 2004, 1,600,000 shares are exercisable any time up to twelve months after the end of the respective employee s employment, 60,000 shares are exercisable at any time over three years from the date of grant, and 15,000 shares are exercisable at any time over ten years from the date of grant. All 2004 options are exercisable at \$0.15 per share. Of the options for 2003, 12,000 shares are exercisable at any time over three years from the date of grant and 2,000 shares are exercisable at any time over ten years from the date of grant. The exercise prices are 2,000 shares at \$0.50 and 12,000 shares at \$0.90. The Company applies APB Opinion 25 in accounting for these stock options. Total option compensation expense, based on the fair market values of the stock on the grant dates, is \$536 for December 31, 2004. For 2004, options for 87,965 shares from prior years expired. For 2003, options for 353,900 shares from prior years expired during the year, resulting in option compensation expense of \$(108,955) and deferred compensation of \$123.

If the Company were to apply the provisions of FASB Statement No. 123 to these options, using the fair value method, compensation expense would have been \$61,575 and \$96 for December 31, 2004 and 2003, respectively. Net loss and loss per share would have been impacted as follows:

	<u>2004</u>	<u>2003</u>
Net Income (Loss):		
As reported	\$(2,839,872)	\$(2,752,291)
Adjustment for additional expense for fair		
value of options	(61,039)	(109,051)
Pro forma	\$(2,900,911)	\$(2,861,342)
Earnings (Loss) per share, basic and diluted		
As reported	\$(0.020)	\$(0.026)
Pro forma, basic and diluted	\$(0.020)	\$(0.028)
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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

The pro forma amounts were estimated for each quarter using the Black-Scholes option pricing model with the following assumptions for 2004 and 2003:

	<u>2004</u>	<u>2003</u>
Dividend yield	0%	0%
Risk-free interest rate	2.75% to 4.75%	3.38%
Expected life	3-10 years	3-10 years
Expected volatility	16.65% to 66.75%	42.71%

NOTE 7 Common Stock to be Issued:

The following summarizes stock transactions commencing prior to December 31, with stock issued or to be issued subsequent to that date:

	<u>2004</u>	<u>2003</u>
Payment of salaries	\$540,900	\$526,375
Payment of consulting and operating fees	4,800	5,600
Payment of director fees	525	1,125
Payment of interest, employees	37,701	67,118
Payment of debt, officer/stockholder	170,000	12,037
Private placement for cash	32,500	60,000
	\$786,426	\$672,255

NOTE 8 - Accrued Expenses:

The following is the composition of accrued expenses as of December 31:

	<u>2004</u>	<u>2003</u>
Accrued vacation	\$ 85,587	\$70,339
Federal and state payroll taxes	219,899	33,366
Sales tax	245	16,590
Audit and annual meeting costs	93,000	93,000
	\$398,731	\$213,295
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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

NOTE 9 Other Comprehensive Income

Following are the components of Other Comprehensive Income:

	Year Ended December 31,	
	<u>2004</u>	2003
Unrealized holding gains (losses)		
arising during the period	\$ 9,109	\$ 360,289
Reclassification adjustment	(393,023)	(227,596)
Other Comprehensive Income	\$(383,914)	\$132,693

NOTE 10 - Related Party Transactions:

Promissory notes are held by stockholders at December 31, 2004 and 2003 (see Note 3 for terms). \$389,127 and \$218,185 of the accrued management salaries as of December 31, 2004 and 2003, respectively, is for salary in arrears due to several officer/stockholders and employee/stockholders. In addition, salary in arrears of \$523,800 and \$515,100

for 2004 and 2003, respectively, are included in stock to be issued at the respective year ends. These amounts represent the portion of salaries earned but unpaid that the officers/employees/stockholders have agreed to accept in the Company s common stock. The number of shares to be issued are 6,488,021 and 6,220,624 for 2004 and 2003, respectively. Issuance of the stock is pending sufficient cash available to pay the related federal withholding taxes. Interest accrued at 12% per annum on salaries due officer and employee/stockholders amounted to \$97,869 and \$113,233, respectively, in 2004 and 2003. Of these amounts, \$94,299 and \$109,290 for 2004 and 2003, respectively, were paid (or will be paid) by issuance of 990,187 and 808,092 shares of restricted common stock.

Interest expense on related party loans amounted to \$31,396 and \$37,030 for the years ended December 31, 2004 and 2003, respectively. Accrued interest on related party loans totaled \$35,082 and \$66,081 at December 31, 2004 and 2003, respectively.

After approval from the Company's Board of Directors, in March 1999 the Company's subsidiary, WWI, agreed to provide technical services to Golden Phoenix Minerals, Inc. (GPXM), a junior mine exploration and development company whose common shares trade on the OTC Bulletin Board. Services were billed monthly and WWI received a combination of GPXM common stock, SEC Rule 144 restricted common stock, and cash. Separately, Dr. Whitney personally agreed to acquire up to 10,000,000 common shares of GPXM at \$0.10 per share, making him beneficial owner of more than ten percent of GPXM. Any unexercised options under this arrangement can be assigned to WWI. Dr. Whitney is a principal in a group that controls the mining claims underlying one of GPXM's principal exploration and development properties. At December 31, 2004 WWI owned 123,198 restricted GPXM shares. At December 31,

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

2003 WWI owned 736,442 restricted GPXM shares. The initial Rule 144 one year period for resale began in April 2000, and continues monthly thereafter. Total revenue from GPXM for 2004 and 2003 was \$224,039 and \$146,893, respectively. A total of \$101,281 and \$13,707 is included in accounts receivable at December 31, 2004 and 2003, respectively. At December 31, 2004, the average bid/asked price for GPXM common was \$0.213, resulting in a value of shares held on that date of \$26,180. Included in the GPXM shares held at December 31, 2003 and 2002 are 300,000 and 1,050,000 restricted common shares, respectively, that were acquired by WWI purchasing \$0.10 options from Dr. Whitney and subsequently exercising the options by offsetting accounts receivable due it from GPXM. The purchase price of the options was \$109,275, which was determined at 85% of fair market value of the then current trading price of GPXM, less the \$0.10 option price. This valuation method is under the same terms that WWI uses to accept GPXM restricted common shares for its monthly services. Dr. Whitney accepted Company restricted common shares in the 2002 Equity Private Placement as payment for the options, which amounted to 1,365,938 shares plus an equal number of warrants with conversion prices ranging from \$0.08 to \$0.24 per share. The total cost to WWI of these GPXM shares was \$214,275 and the market value at December 31, 2002 was \$241,500. The 300,000 shares held at December 31, 2003 were valued at \$135,750 and had a cost of \$70,650.

During 2004 Dr. Whitney loaned WWI 103,765 shares of GPXM stock at a value of \$28,276 The loaned shares were sold by WWI for \$25,097, for a realized loss of \$3,179. The loan was repaid in 2004 by conversion into the Company s restricted common stock when Dr. Whitney exercised warrants he acquired in 2003. During the first quarter of 2002 Dr. Whitney loaned WWI 600,000 shares of GPXM stock at a value of \$105,000. The loaned shares were sold by WWI for \$83,045, for a realized loss of \$21,955. In 2002, WWI repaid 416,463 of the GPXM shares out of shares

owned by it at a value of \$72,881 and a realized gain of \$35,587. During 2003 the remaining balance of the loan and accrued interest was paid by a combination of 87,283 GPXM shares, 250,000 shares of other marketable securities, and 150,461 Company restricted common shares. The portion of the loan paid in Company shares was converted into the \$0.08 per share Private Placement under the same terms and conditions as other investors, including an equal number of three year warrants. WWI realized a net gain of \$19,369 on the transaction.

During 2003 WWI s lease of a vehicle utilized by Dr. Whitney was completed. Dr. Whitney purchased the vehicle by financing it through a commercial lender. The purchase price was \$21,741 and the monthly payment for four years is \$531. WWI is leasing the vehicle from Dr. Whitney by making the monthly payments to the commercial lender and will acquire ownership of the vehicle when the loan is paid in full.

For related party transactions subsequent to December 31, 2004, see Note 16.

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

NOTE 11 - Lease Commitments and Rent Expense:

Operating Leases:

The Company leases its corporate office facility under a non-cancelable agreement which expires June 30, 2005. Monthly payments are \$4,912.

A wholly owned subsidiary of the Company, IMI, leases storage facilities on a month-to-month basis and, therefore, no long-term binding contractual obligation exists with regards to minimum lease payments. The monthly rent payment is \$1,000.

A wholly owned subsidiary of the Company, WWI, is committed under a non-cancelable agreement for the use of office space which expires July 31, 2006. The monthly lease payment totals \$2,430.

Future minimum rental commitments at December 31, 2004, under these operating lease agreements are due as follows:

2005	\$58,632
2006	17,010
2007	-
2008	-

\$75,642

Total rental expense included in the statements of operations for the years ended December 31, 2004 and 2003 is \$99,981 and \$105,867, respectively.

Capital Leases:

At varying dates in 1999 the Company's subsidiaries, WWI and IMI, entered into leases to finance the equipment for the manufacturing facility in Reno/Stead, Nevada and for computer equipment. The leases totaled \$987,315. Of this amount \$408,788 was received in cash, of which \$65,033 was in connection with two sale/leaseback transactions of computer and office equipment. The lease periods range from three to five years, and the total monthly lease payments are \$24,192. With the exception of two leases, all have buyout options for \$1 at the end of the lease. The remaining two leases have buyout provisions totaling \$9,667.

At varying dates in 2000 the Company and its subsidiaries entered into leases primarily for financing purposes. The leases totaled \$543,832, of which \$437,636 was received in cash. The lease periods range from three to five years, and the total monthly lease payments are \$13,737. All the leases have buyout options for \$1 at the end of the lease.

At varying dates in 2001 the Company and its subsidiaries entered into leases both for new plant equipment and for financing purposes. The leases totaled \$288,881, of which \$192,282 was received in cash. The lease periods

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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range from four to five years, and the total monthly lease payments are \$7,413. All the leases have buyout options for \$1 at the end of the lease, with the exception of one lease which has a fair market value purchase option at the end of the lease, which is anticipated to be a nominal amount.

At varying dates in 2002 the Company and its subsidiaries entered into leases for new plant and office equipment. The leases totaled \$209,502. The lease periods range from three to five years, and the total monthly lease payments are \$2,914. All the leases have buyout options for \$1 at the end of the lease.

At varying dates in 2003 the Company and its subsidiaries entered into leases for automotive and office equipment. The leases totaled \$31,008. The lease periods are for four years, and the total monthly lease payments are \$807. All the leases have buyout options for \$1 at the end of the lease.

In January 2004 the Company and its subsidiaries entered into a lease for office equipment. The lease totaled \$2,236, with a lease period of four years, and total monthly lease payments of \$66. The lease has a buyout option for \$1 at the end of the lease.

As of December 31, 2004 lease payments totaling \$741,597 were in arrears. As required by U.S. Generally Accepted Accounting Principles, the principal balance of the leases that are in default are classified as a current liability. Some of the lessors have filed suit to recover the amounts due under the leases. The present status of these actions is discussed in Note 15. The Company is making ongoing payment arrangements with these and the other lessors to

avoid action that may be adverse to the Company.

All of the above described leases are secured by the equipment acquired or financed under the lease.

Future minimum lease commitments at December 31, 2004 are due as

follows:

	Unrelated	Related
	<u>Parties</u>	<u>Party</u>
2005	\$ 974,123	\$ 6,370
2006	-	6,370
2007	-	2,655
2008	-	-
2009	-	-
	974,123	15,395
Less: amounts representing interest	(166,377)	(831)
	\$ 807,746	\$14,564
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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

NOTE 12 - Business Segments:

The Company and its subsidiaries operate primarily in two business segments as identified in Note 1. The following defines business segment activities:

Photochemical Fertilizer: Photochemical recycling,

Silver recovery,

Fertilizer production and

Sales

Mining Technical Services: Mining industry services

The photochemical fertilizer segment operates principally in Northern Nevada and Southern California and, to a lesser extent, Northern California. The primary source of revenue for this segment is from the pick-up and processing of photochemicals, recovery of silver therefrom, and sales of GOLD n GRO fertilizer products. The customer base is diverse and includes organizations in the photo-processing, printing, x-ray and medical fields. Fertilizer sales are concentrated in the same geographic markets and the customer base is principally in commercial markets, including golf courses, turf farms, and specialty agriculture which includes vegetables, fruit and nut trees, and wine and table grapes.

The mining technical services segment performs its services primarily out of the Company's Reno, Nevada offices, but its source of clients is not limited to organizations based locally. It has served both national and international clients in the past. As discussed in Note 4, at present the segment is serving primarily two clients in the gold mining industry, who have several operations in different areas of the United States.

The Company measures segment performance based on net income or loss. At present there are no intercompany revenues. Costs benefiting both segments are incurred by both the Company and by Whitney & Whitney, Inc. Such costs are allocated to each segment based on the estimated benefits to the segment. General and administrative costs incurred by the Company that have no other rational basis for allocation are divided evenly between the segments. Cost allocation percentages are reviewed annually and are adjusted based on expected business conditions for the year.

Reconciliation of segment revenues, cost of sales, gross profit (loss), operating income (loss), other income (loss) and net income (loss) to the respective consolidated amounts follows:

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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	<u>2004</u>	<u>2003</u>
Revenues		
Photochemical Fertilizer	\$1,422,929	\$ 936,913
Mining Technical Services	297,120	331,874
Consolidated Revenues	\$1,720,049	\$1,268,787

Cost	οf	Sales

Photochemical Fertilizer	\$1,457,616	\$1,119,831
Mining Technical Services	230,137	308,809
Consolidated Cost of Sales	\$1,687,753	\$1,428,640
Gross Profit (Loss)		
Photochemical Fertilizer	\$(34,687)	\$(182,918)
Mining Technical Services	66,983	23,065
Consolidated Gross Profit (Loss)	\$ 32,296	\$(159,853)
Operating Income (Loss)		
Photochemical Fertilizer	\$(2,024,481)	\$(1,834,621)
Mining Technical Services	(382,145)	(359,324)
Consolidated Operating Income (Loss)	\$(2,406,626)	\$(2,193,945)
Other Income (Expense)		
Photochemical Fertilizer	\$(602,213)	\$(1,014,821)
Mining Technical Services	168,967	456,475
Consolidated Other Income (Expense)	\$(433,246)	\$(558,346)
Net Income (Loss)		
Photochemical Fertilizer	\$(2,626,694)	\$(2,849,442)
Mining Technical Services	(213,178)	97,151
Consolidated Net Income (Loss) before taxes	\$(2,839,872)	\$(2,752,291)
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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

Other segment information:	<u>2004</u>	<u>2003</u>
Capital expenditures by business segment:		
Photochemical Fertilizer	\$243,989	\$46,419
Mining Technical Services	4,477	32,426
Consolidated Capital Expenditures	\$248,466	\$78,845
Depreciation and amortization expense by business segment:		
Photochemical Fertilizer		
Depreciation	\$173,555	\$175,568
Amortization	119,324	120,952
	292,879	296,520
Mining Technical Services		
Depreciation	16,462	19,188
Amortization	16,064	21,030
	32,525	40,218
Consolidated Depreciation and Amortization	\$325,404	\$336,738

General and administrative expenses of \$153,887 and \$179,761 incurred by Itronics Inc. were equally divided between the two segments for 2004 and 2003, respectively.

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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Identifiable assets by business segment (net of accumulated depreciation, accumulated amortization, and allowance for doubtful accounts):

	2004		2003	
	РНОТО-	MINING	РНОТО-	MINING
	CHEMICAL	TECHNICAL	CHEMICAL	TECHNICAL
	<u>FERTILIZER</u>	<u>SERVICES</u>	<u>FERTILIZER</u>	<u>SERVICES</u>
ASSET DESCRIPTION				
Current Assets				
Cash	\$ 4,370	\$ 420	\$ 6,249	\$ 25,753
Accounts receivable, net	73,339	115,466	71,197	25,187
Marketable securities	-	26,180	-	413,240
Inventories	569,878	1,826	423,699	1,826
Deferred loan fees, current	14,152	-	36,234	4,539
Prepaid expenses	23,015	13,711	39,371	3,049
	684,754	157,603	576,750	473,594
Property and Equipment, net				
Land	215,000	-	215,000	-
Building and improvements	1,026,356	-	1,058,798	-
Construction in progress,				
manufacturing facility	121,171	-	102,203	-
Equipment	1,116,920	25,601	1,021,596	54,054
Vehicles	7,136	-	21,501	-
Equipment under capital lease	524,166	96,741	571,949	125,170
	3,010,749	122,342	2,991,047	179,224

Patents, trademarks, and other	8,435	-	8,483	-
Marketable securities	-	-	-	120,000
Inter-company investments/loans	-	1,234,257	-	1,782,550
Deposits	9,760	12,567	11,180	15,197
Deferred loan fees	34,502	-	49,113	-
	52,697	1,246,824	68,776	1,917,747
	\$3,748,200	\$1,526,769	\$ 3,636,573	\$2,570,565

Reconciliation of segment assets to consolidated assets:

	<u>2004</u>	<u>2003</u>
Total Assets:		
Photochemical Fertilizer	\$3,748,200	\$ 3,636,573
Mining Technical Services	1,526,769	2,570,565
Total Segment Assets	5,274,969	6,207,138
Itronics Inc. assets	22,504,867	20,587,504
Less: inter-company elimination	(23,631,896)	(22,354,134)
Consolidated Assets	\$4,147,940	\$ 4,440,508
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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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NOTE 13 - Going Concern:

The Company's consolidated financial statements have been presented on the basis that it is a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. The Company and its subsidiaries have reported recurring losses from operations, including a net loss of \$2,839,872 during the year ended December 31, 2004, a negative working capital of \$3,215,298, and a stockholders deficit balance of \$2,564,270 as of December 31, 2004. These factors indicate the Company and its subsidiaries' ability to continue in existence is

dependent upon their ability to obtain additional long-term debt and/or equity financing and achieve profitable operations. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or the amounts and classification of liabilities that might be necessary should the Company and its subsidiaries be unable to continue in existence.

Prior to acquiring Whitney & Whitney, Inc. in 1988, the Company registered 1,777,000 common shares for public offering. Due to security law changes immediately subsequent to the offering, the offering did not raise sufficient equity capital to complete the Company's business plan. In order to solve the Company's liquidity problems, management implemented a plan of obtaining equity through private placements of common shares, convertible debt, conversion of debt to common shares, and payment of consulting and other labor services with common shares.

In addition to continuing the above described efforts, development of the technology necessary to manufacture fertilizer from photochemicals has been completed. In March 1998 the Company s subsidiary, Itronics Metallurgical, Inc., signed a definitive manufacturing and distribution agreement with Western Farm Services, Inc. (WFS). The agreement gives WFS the exclusive license and right to manufacture and market the GOLD n GRO line of fertilizer products in the states of Arizona, California, Hawaii, Idaho, Oregon and Washington. The agreement is for five years, with five year renewal options. In March 2003 the companies entered the second five year term of the agreement.

A summary of the results of efforts to raise funds through various private placements over the last several years is presented in Note 6.

NOTE 14 - Off-Balance Sheet Risks and Concentration of Credit Risk:

The Company occasionally maintains bank deposits in excess of federally insured limits. The Company s risk is managed by maintaining its accounts in one of the top five largest banks in the country.

As of December 31, 2004, a significant portion of the Company's accounts receivable is concentrated with one fertilizer distribution company. This concentration of credit risk is somewhat mitigated due to the fact that the distribution company is one of the largest fertilizer distribution companies in the country.

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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Increase or decrease in photochemical recycling service and silver extraction revenues has a direct relationship with federal, state, and local regulations and enforcement of said regulations. Fertilizer revenues could be impacted by crop cycles, seasonal variations, and weather patterns.

The ability to recognize a net profit from silver recovery sales is based on the fair market value of silver (Handy & Harmon five day average) at the time the photochemicals are obtained versus the fair market value of silver when recovered silver is sold. Most customers are given an 80% silver credit against recycling services based on the content of silver in the photochemicals. If the fair market value of silver declines, the possibility exists that the 80% credit, plus operating costs associated with the silver extraction, could exceed the revenues generated at the time the silver is

sold.

Management's long term plan to reduce the market risk of silver is to increase the volume of photochemicals and the resultant silver recovery, and then to implement a hedging program in which silver will be sold forward, thereby matching the price to be received to the price paid to the Company's customers.

As a handler of photochemical materials, and a seller of liquid fertilizers, the Company is subject to various federal, state, and local environmental, safety, and hazardous waste regulations and state fertilizer registration requirements. The Company believes that its policies and procedures for handling hazardous wastes are in compliance with the applicable laws and regulations and are consistent with industry standards. Costs for these compliance activities are expensed as incurred. As the Company's photochemical fertilizer business expands, the various laws and regulations that are applicable to the Company's activities will change. During 1996, the Company received concurrence from the State of Nevada environmental officials that the Company's photochemical fertilizer process meets the existing requirements for exemption from all environmental regulations, except toxic metal content standards, and with the exception that certain presently conducted lab analyses of the photochemicals will continue to be required. Certain of the Company's large scale customers presently meet the exemption requirements. Now that all the photochemicals are utilized in the fertilizer or other commercial products, all the Company's customers are arguably exempt.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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NOTE 15 Legal Proceedings

In August 2002 a supplier of equipment for the Stead manufacturing plant filed suit against the Company and its subsidiary, Itronics Metallurgical, Inc. (IMI) in Johnson County, Indiana for the unpaid amount of \$64,234 plus attorney s fees and court costs. On October 1, 2002 the plaintiff received a default judgment awarding the \$64,234 plus \$1,500 attorney s fees plus 8% interest. On November 5, 2002 the plaintiff filed a "Notice of Filing of Foreign Judgment" in Washoe County, Nevada and has received the judgment. In December 2003 a settlement agreement was accepted that required a \$10,000 payment in December 2003 plus monthly payment of \$5,161 over twelve months in 2004. Payments are delinquent as of December 31, 2004. In February 2005 the plaintiff received approximately \$6,700 by levying three of the Company s bank accounts. No further collection action has been taken.

As of December 31, 2004 a total of nine lawsuits filed in 2003 and prior remain outstanding against the Company s subsidiaries by various equipment lessors. Five of the suits were filed in Washoe County, Nevada, two in Cook County, Illinois, one in Los Angeles County, California, and one in Oakland County, Michigan. Three additional suits covering six leases were filed in Washoe County, Nevada in 2004. The suits seek a total of \$839,934 plus attorneys fees and other costs. Six of these suits, seeking a total of \$306,990 plus costs, were settled by restructuring the leases, signing stipulated judgments and agreeing to pay total payments of \$258,390. Monthly payments on the settlements total \$12,935 and are paid over various periods ranging from 18 to 31 months. If the restructured leases are defaulted, judgments for the original claimed amounts can be entered and further collection action, including repossession of the secured equipment, can be taken. Payments on five of the restructured leases are in default, but no additional collection action has been taken. Of the six remaining unsettled suits, three have received judgments, of which one has filed for a debtors examination which was to occur in April 2005. The Company has agreed to payment terms on that lease and the examination has been stayed until June 2005. Legal counsel is actively negotiating two of the unsettled

suits. No further action has occurred on the other unsettled suit.

In February 2003 a trade creditor filed suit against the Company in Washoe County, Nevada seeking a total of \$85,525 plus attorney fees and other costs. A default judgment was entered in May 2003. No further collection action has occurred on this claim.

As of December 31, 2004 the Company s subsidiaries were delinquent on approximately \$206,200 in federal payroll taxes. The Company engaged a consultant to assist in working with the IRS to formulate a payment plan. A plan was negotiated to pay specified portions of the liability on or before January 31, 2005 and on the fifteenth of each month beginning March 15, 2005 until paid off on May 15, 2005. The Company made the required payments in January and March 2005, and paid a total of \$115,586, but did not make the subsequent payments as they became due. The Company has received final notice, notice of intent to levy, on the subsidiaries IMI and ICI for a total amount

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

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due of \$93,273. The notices are dated May 12, 2005. They indicate the Company has 30 days from that date to pay the tax, make alternative payment arrangements, or request appeals consideration. After the 30 days, the IRS may seize Company property to satisfy the debt. The IRS may also file federal tax liens for the amounts due at any time. Successful completion of a payment plan is dependent on future financing as more fully discussed in the Working Capital/Liquidity section of Management s Discussion and Analysis or Plan of Operations.

Successful settlement of the above claims is dependent on additional financing, which is being actively pursued.

NOTE 16 - Subsequent Events:

The following summarizes common stock issued from January 1, 2005 through May 19, 2005 and common stock to be issued as of March 31, 2005:

	ISSUED TO BE ISSUED			
	<u>SHARES</u>	<u>AMOUNT</u>	<u>SHARES</u>	<u>AMOUNT</u>
Labor and consulting services	3,770,790	\$276,670	6,792,940	\$548,140
Director fees	12,500	1,025	5,000	500
Interest on deferred salaries	191,864	12,726	630,475	53,030

Loan conversions-officer	3,025,000	170,000	-	-
Convertible notes payable converted	8,193,081	835,230	-	-
Private placement for cash	11,850,000	592,500	-	-
Acquisition of GOLD n GRO Guardian	1,000,000	71,500	-	-
	28,043,235	\$1,959,651	7,428,415	\$601,670

\$583,030 in salary and interest remains unissued as of the May 19, 2005 to conserve cash otherwise needed to pay payroll taxes.

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ITRONICS INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 2004 AND 2003

NOTE 17 Earnings (Loss) Per Share:

Following is a reconciliation of Net Income (Loss) and Weighted average number of shares outstanding, in the computation of earnings (loss) per share (EPS) for the years ended December 31, 2004 and 2003.

	<u>2004</u>	<u>2003</u>
Net Income (Loss)	\$(2,839,872)	\$(2,752,291)
Less: Preferred stock dividends	-	-
Basic EPS income (loss) available to		
common stockholders	\$(2,839,872)	\$(2,752,291)
Weighted average number of shares outstanding	141,941,235	103,994,400
Common equivalent shares	-	-
	141,941,235	103,994,400

Per share amount \$(0.026)

Warrants, options, and shares to be issued, totaling 62,953,132 and 68,633,857 shares as of December 31, 2004 and 2003, respectively, would dilute future EPS. No diluted EPS is presented as the effect of including these shares is antidilutive.

ITEM 14.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

Following is a summary of the aggregate fees billed for professional service by the Company s principal accountants.

	<u>2004</u>	<u>2003</u>
Audit fees	\$62,685	\$37,000
Audit related fees	1,100	1,400
Tax fees	-	500
All other fees	-	-
Total	\$63,785	\$38,900

The audit related fees listed above pertain to the issuance of cold comfort letters related to the Company s exercise of its put rights under the Swartz agreement and the issuance of consent letters for inclusion in S-8 registration statements.

The Company does not have an audit committee and consequently the entire Board of Directors serves in that capacity. The Board s pre-approval policy regarding professional services provided by the Company s principal accountant is to pre-approve the engagement of the

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principal accountant for the performance of all professional services. The policy does provide a waiver of pre-approval in the event that such services, in the aggregate, will be less than 5% of the audit fee, such services are not recognized as non-audit fees at the time of the engagement, and pre-approval is obtained from a designated member of the Board prior to the engagement. Until such time as an audit committee is appointed, the designated individual is the Principal Executive Officer, currently the President of the Company. 100% of the 2003 non-audit fees were pre-approved by the designated Board member and subsequently approved by the Board.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ITRONICS INC.

Date: May 23, 2005 By: /S/ JOHN W. WHITNEY

John W. Whitney

President, Treasurer and Director

(Principal Executive Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Company and in the capacities and on the dates indicated.

Date: May 23, 2005 By: /S/ JOHN W. WHITNEY

John W. Whitney

President, Treasurer and Director

(Principal Executive and Financial

Officer)

Date: May 23, 2005 By: /S/ MICHAEL C. HORSLEY

Michael C. Horsley

Controller

(Principal Accounting Officer)

Date: May 23, 2005 By: /S/ PAUL H. DURCKEL

Paul H. Durckel

Director

Date: May 23, 2005 By: /S/ HOWLAND S. GREEN

Howland S. Green

Director