

ITRONICS INC
Form SB-2/A
November 10, 2005

As filed with the Securities and Exchange Commission on November 10, 2005
Registration No. 333-127855

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
WASHINGTON D.C. 20549

AMENDMENT NO. 1 TO
FORM SB-2
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

ITRONICS INC.

(Name of small business issuer in its charter)

Texas	2870	75-2198369
(State or other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

**6490 S. McCarran Blvd., Bldg C-23
Reno, Nevada 89509
(775) 689-7696**

(Address and telephone number of principal executive offices and principal place of business)

**Dr. John W. Whitney, Chief Executive Officer
ITRONICS INC.**

**6490 S. McCarran Blvd., Bldg C-23
Reno, Nevada 89509
(775) 689-7696**

(Name, address and telephone number of agent for service)

Copies to:

**Gregory Sichenzia, Esq.
Eric A. Pinero, Esq.
Sichenzia Ross Friedman Ference LLP
1065 Avenue of the Americas, 21st Flr.
New York, New York 10018
(212) 930-9700
(212) 930-9725 (fax)**

APPROXIMATE DATE OF PROPOSED SALE TO THE PUBLIC:

From time to time after this Registration Statement becomes effective.

If any securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: x

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o _____

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o _____

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o _____

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. o _____

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered (1)	Proposed maximum offering price per share (2)	Proposed maximum aggregate offering price	Amount of registration fee
Common stock, \$.001 par value issuable upon conversion of the secured convertible notes	39,391,000 ⁽³⁾	\$.08	\$3,151,280	\$370.91
Common stock, \$.001 par value issuable upon exercise of warrants	609,000 ⁽⁴⁾	\$.08	\$48,720	\$5.73
Total	40,000,000		\$3,200,000	\$376.64

* Previously paid.

(1) Includes shares of our common stock, par value \$0.001 per share, which may be offered pursuant to this registration statement, which shares are issuable upon conversion of secured convertible notes and the exercise of warrants held by the selling stockholders. In addition to the shares set forth in the table, the amount to be registered includes an indeterminate number of shares issuable upon conversion of the secured convertible notes and exercise of the warrants, as such number may be adjusted as a result of stock splits, stock dividends and similar transactions in accordance with Rule 416. The number of shares of common stock registered hereunder represents a good faith estimate by us of the number of shares of common stock issuable upon conversion of the secured convertible notes and upon exercise of the warrants. For purposes of estimating the number of shares of common stock to be included in this registration statement, we calculated a good faith estimate of the number of shares of our common stock that we believe will be issuable upon conversion of the secured convertible notes and upon exercise of the warrants to account for market fluctuations, and antidilution and price protection adjustments, respectively. Should the conversion ratio result in our having insufficient shares, we will not rely upon Rule 416, but will file a new registration statement to cover the resale of such additional shares should that become necessary. In addition, should a decrease in the exercise price as a result of an issuance or sale of shares below the then current market price, result in our having insufficient shares, we will not rely upon Rule 416, but will file a new registration statement to cover the resale of such additional shares should that become necessary.

(2) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(c) and Rule 457(g) under the Securities Act of 1933, using the average of the high and low price as reported on the Over-The-Counter Bulletin Board on August 25, 2005, which was \$.08 per share.

(3) Includes a good faith estimate (200%) of the shares underlying secured convertible notes to account for market fluctuations.

(4) Includes a good faith estimate of the shares underlying warrants exercisable at \$.15 per share to account for antidilution and price protection adjustments.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

THE INFORMATION CONTAINED IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. WE MAY NOT SELL THESE SECURITIES UNTIL THE REGISTRATION STATEMENT FILED WITH THE

SECURITIES AND EXCHANGE COMMISSION IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE OFFER OR SALE IS NOT PERMITTED.

PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION, DATED NOVEMBER 10, 2005

**ITRONICS INC.
40,000,000 SHARES OF
COMMON STOCK**

This prospectus relates to the resale by the selling stockholders of up to 40,000,000 shares of our common stock, including up to 32,000,000 shares of common stock underlying secured convertible notes in a principal amount of \$3,250,000 and up to 8,000,000 shares of common stock issuable upon the exercise of common stock purchase warrants. The secured convertible notes are convertible into our common stock at the lower of \$0.10 or at a 45% discount to the average of the three lowest intraday trading prices for the common stock on a principal market for the 20 trading days before but not including the conversion date. The selling stockholders may sell common stock from time to time in the principal market on which the stock is traded at the prevailing market price or in negotiated transactions. The selling stockholders may be deemed underwriters of the shares of common stock, which they are offering. We will pay the expenses of registering these shares.

Our common stock is registered under Section 15(d) of the Securities Exchange Act of 1934 and is listed on the Over-The-Counter Bulletin Board under the symbol "ITRO". The last reported sales price per share of our common stock as reported by the Over-The-Counter Bulletin Board on August 25, 2005, was \$.08.

Investing in these securities involves significant risks. See "Risk Factors" beginning on page 6.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this Prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is _____, 2005.

The information in this Prospectus is not complete and may be changed. This Prospectus is included in the Registration Statement that was filed by Itronics Inc. with the Securities and Exchange Commission. The selling stockholders may not sell these securities until the registration statement becomes effective. This Prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the sale is not permitted.

TABLE OF CONTENTS

Cautionary Note Regarding Forward-Looking Statements	2
Prospectus Summary	3
Risk Factors	6
Use Of Proceeds	12
Market For Common Equity And Related Stockholder Matters	15
Management's Discussion And Analysis Of Financial Condition And Results Of Operations	17
Business	37
Description Of Properties	51
Legal Proceedings	53
Management	54
Executive Compensation	56
Certain Relationships And Related Transactions	59
Security Ownership Of Certain Beneficial Owners And Management	60
Description Of Securities	61
Commission's Position On Indemnification For Securities Act Liabilities	61
Plan Of Distribution	61
Selling Stockholders	64
Legal Matters	69
Experts	69
Available Information	69
Index to Consolidated Financial Statements	70

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and any prospectus supplement contain forward-looking statements. We have based these forward-looking statements on our current expectations and projections about future events.

In some cases, you can identify forward-looking statements by words such as “may,” “should,” “expect,” “plan,” “could,” “anticipate,” “intend,” “believe,” “estimate,” “predict,” “potential,” “goal,” or “continue” or similar terminology. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks outlined under “Risk Factors,” that may cause our or our industry’s actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by such forward-looking statements.

Unless we are required to do so under U.S. federal securities laws or other applicable laws, we do not intend to update or revise any forward-looking statements.

PROSPECTUS SUMMARY

The following summary highlights selected information contained in this prospectus. This summary does not contain all the information you should consider before investing in the securities. Before making an investment decision, you should read the entire prospectus carefully, including the "risk factors" section, the financial statements and the notes to the financial statements.

ITRONICS INC.

We are the inventor and developer of the "Beneficial Use Photochemical, Silver, and Water Recycling" technology that produces environmentally beneficial GOLD'n GRO fertilizers and silver bullion.

We are a process technology company that has developed what we believe is a unique technology for photochemical recycling. We, through our subsidiary, Itronics Metallurgical, Inc., extract more than 99% of the silver and virtually all of the other toxic heavy metals from used photoliquids. We then 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 silver bullion. We also provide process planning and technical services to the mining industry.

For the years ended December 31, 2004 and 2003, we generated net revenues in the amount of \$1,720,049 and \$1,268,787 and net losses of \$2,839,872 and \$2,752,291, respectively. For the six months ended June 30, 2005, we generated net revenues in the amount of \$867,301 and a net loss of \$1,732,994. As a result of recurring losses from operations and an accumulated deficit of \$22,944,959 as of December 31, 2004, our Independent Registered Public Accounting Firm, in their report dated May 19, 2005, have expressed substantial doubt about our ability to continue as going concern.

Our principal offices are located at 6490 S. McCarran Blvd., Bldg C-23, Reno, Nevada 89509, and our telephone number is (775) 689-7696. We are a Texas corporation.

Common stock offered by selling stockholders Up to 40,000,000 shares, including the following:

- up to 39,391,000 shares of common stock underlying secured convertible notes in the principal amount of \$3,250,000 (includes a good faith estimate of the shares underlying secured convertible notes to account for market fluctuations and antidilution protection adjustments, respectively),
- up to 609,000 shares of common stock issuable upon the exercise of common stock purchase warrants at an exercise price of \$.15 per share (includes a good faith estimate of the shares underlying warrants to account for antidilution protection adjustments),

This number represents 20.31% of our current outstanding stock.

Common stock to be
outstanding after the offering

Up to 236,907,628 shares

Use of proceeds

We will not receive any proceeds from the sale of the common stock. However, we will receive the sale price of any common stock we sell to the selling stockholders upon exercise of the warrants. We expect to use the proceeds received from the exercise of the warrants, if any, for general working capital purposes. However, AJW Partners, LLC, AJW Qualified Partners, LLC, AJW Offshore, Ltd., and New Millennium Partners II, LLC will be entitled to exercise up to 3,000,000 warrants on a cashless basis if the shares of common stock underlying the warrants are not then registered pursuant to an effective registration statement. In the event that AJW Partners, LLC, AJW Qualified Partners, LLC, AJW Offshore, Ltd., or New Millennium Partners II, LLC exercise the warrants on a cashless basis, then we will not receive any proceeds from the exercise of those warrants. In addition, we have received gross proceeds \$1,250,000 from the sale of the secured convertible notes and the investors are obligated to provide us with an additional \$2,000,000; \$1,000,000 within five days of the filing of this registration statement, and \$1,000,000 within five days of this prospectus being declared effective. The proceeds received from the sale of the secured convertible notes will be used for business development purposes, working capital needs, pre-payment of interest, payment of consulting and legal fees and purchasing inventory.

Over-The-Counter Bulletin
Board Symbol

ITRO

The above information regarding common stock to be outstanding after the offering is based on 196,907,628 shares of common stock outstanding as of August 24, 2005 and assumes the subsequent conversion of our issued secured convertible notes and exercise of warrants by our selling stockholders.

EXPLANATORY NOTE: On July 15, 2005, we entered into a Securities Purchase Agreement with four accredited investors. In addition, on July 5, 2005 we entered into a Finder's Agreement with Confin International Investments, which acted as selling agent in connection with the July 2005 Securities Purchase Agreement. Any issuance of shares of common stock pursuant to the Securities Purchase Agreement and Finder's Agreement that would require us to issue shares of common stock in excess of our authorized capital is contingent upon us obtaining shareholder approval to increase our authorized shares of common stock from 250,000,000 to 1,000,000,000 and filing the certificate of amendment to our certificate of incorporation. We filed a proxy statement with the Securities and Exchange Commission on August 31, 2005, asking a super majority of our shareholders to authorize the increase in our authorized shares of common stock. If a super majority of our shareholders approve an increase in our authorized shares of common stock, we intend on filing the certificate of amendment to our certificate of incorporation immediately following our shareholder meeting. We are registering 40,000,000 shares of common stock pursuant to this prospectus that are underlying the secured convertible notes and warrants issued in connection with the Securities Purchase Agreement. Upon filing the certificate of amendment, we will amend this prospectus to include additional shares of common stock that are issuable pursuant to the Securities Purchase Agreement and the shares of common stock that are issuable pursuant to the Finder's Agreement.

JULY 2005 SECURITIES PURCHASE AGREEMENT

To obtain funding for our ongoing operations, we entered into a Securities Purchase Agreement with four accredited investors on July 15, 2005 for the sale of (i) \$3,250,000 in secured convertible notes and (ii) warrants to buy 3,000,000 shares of our common stock.

The investors are obligated to provide us with the funds (gross proceeds) as follows:

- \$250,000 was disbursed on July 15, 2005;
- \$1,000,000 was disbursed on August 1, 2005, upon receipt by the investors of a certificate representing the pledged shares of Dr. John W. Whitney, our President, as security for repayment of the secured convertible notes in the aggregate amount of 14,550,558 shares pursuant to the Guaranty and Pledge Agreement dated as of July 15, 2005;
- \$1,000,000 will be disbursed within five days of the filing of this registration statement; and
- \$1,000,000 will be disbursed within five days of the effectiveness of this prospectus.

The secured convertible notes bear interest at 8%, mature three years from the date of issuance, and are convertible into our common stock, at the selling stockholders' option, at the lower of (i) \$0.10 or (ii) a 45% discount to the average of the three lowest intraday trading prices for the common stock on a principal market for the 20 trading days before but not including the conversion date. Accordingly, there is in fact no limit on the number of shares into which the notes may be converted. As of August 22, 2005, the average of the three lowest intraday trading prices for our common stock during the preceding 20 trading days as reported on the Over-The-Counter Bulletin Board was \$.06 and, therefore, the conversion price for the secured convertible notes was \$.033. Based on this conversion price, the \$3,250,000 secured convertible notes, excluding interest, were convertible into 98,484,848 shares of our common stock.

AJW Partners, LLC, AJW Qualified Partners, LLC, AJW Offshore, Ltd. and New Millennium Partners II, LLC have contractually agreed to restrict their ability to convert or exercise their warrants and receive shares of our common stock such that the number of shares of common stock held by them and their affiliates after such conversion or exercise does not exceed 4.99% of the then issued and outstanding shares of common stock.

Confin International Investments (the "Selling Agent") acted as selling agent in connection with the offering. We will issue up to a total of 3,000,000 warrants to the Selling Agent and the Selling Agent will receive gross fees of \$260,000, representing 8% of the total gross proceeds received by us, as consideration for services performed in connection with the issuance of the secured convertible notes and warrants to the investors pursuant to the July 2005 Securities Purchase Agreement.

See the "Selling Stockholders" and "Risk Factors" sections for a complete description of the secured convertible notes.

RISK FACTORS

This investment has a high degree of risk. Before you invest you should carefully consider the risks and uncertainties described below and the other information in this prospectus. If any of the following risks actually occur, our business, operating results and financial condition could be harmed and the value of our stock could go down. This means you could lose all or a part of your investment.

Risks Relating to Our Business:

We Have a History Of Losses Which May Continue, and May Negatively Impact Our Ability to Achieve Our Business Objectives.

We incurred net losses of \$2,839,872 and \$2,752,291 for the years ended December 31, 2004 and 2003, respectively. For the six months ended June 30, 2005, we incurred a net loss of \$1,732,994. We cannot assure you that we can achieve or sustain profitability on a quarterly or annual basis in the future. Our operations are subject to the risks and competition inherent in the establishment of a business enterprise. There can be no assurance that future operations will be profitable. Revenues and profits, if any, will depend upon various factors, including whether we will be able to continue expansion of our revenue. We may not achieve our business objectives and the failure to achieve such goals would have an adverse impact on us.

If We Are Unable to Obtain Additional Funding, Our Business Operations Will be Harmed. In Addition, Section 4e of the July 2005 Securities Purchase Agreements Contains Certain Restrictions and Limitations on Our Ability to Seek Additional Financing. If We Do Obtain Additional Financing, Our Then Existing Shareholders May Suffer Substantial Dilution.

We will require additional funds to sustain and expand our sales and marketing activities. Additional capital will be required to effectively support the operations and to otherwise implement our overall business strategy. Without the prior written consent of a majority-in-interest of the investors for a period ending on the later of (i) 270 days from the closing date, or (ii) 180 days from the date that this registration statement is declared effective by the SEC, Section 4e of our July 2005 Securities Purchase Agreement limits our ability to seek additional financing, including negotiating or contracting with any party to obtain additional equity financing (including debt financing with an equity component) which involves the following:

- the issuance of shares of our common stock at a discount to the market price on the date of issuance;
- the issuance of convertible securities that are convertible into an indeterminate number of shares of our common stock; or
- the issuance of warrants to purchase shares of our common stock.

There can be no assurance that financing will be available in amounts or on terms acceptable to us, if at all, or if a majority-in-interest of the investors under our July 2005 Securities Purchase Agreement will provide their prior written consent for us to engage in additional financing involving the issuance of our securities as set forth above. The inability to obtain additional capital will restrict our ability to grow and may reduce our ability to continue to conduct business operations. If we are unable to obtain additional financing, we will likely be required to curtail our marketing and development plans and possibly cease our operations. Any additional equity financing may involve substantial dilution to our then existing shareholders.

Our Independent Registered Public Accounting Firm Has Stated There is Substantial Doubt About Our Ability to Continue As a Going Concern, Which May Hinder Our Ability to Obtain Future Financing.

In their report dated May 19, 2005 on our financial statements as of and for the year ended December 31, 2004, our independent registered public accounting firm stated that our recurring losses from operations and our accumulated deficit as of December 31, 2004 raised substantial doubt about our ability to continue as a going concern. Since

December 31, 2004, we have continued to experience net operating losses. Our ability to continue as a going concern is subject to our ability to generate a profit and/or obtain necessary funding from outside sources, including obtaining additional funding from the sale of our securities, increasing sales or obtaining loans and grants from various financial institutions where possible. Our continued net operating losses and stockholders' deficiency increase the difficulty in meeting such goals and there can be no assurances that such methods will prove successful.

If We Are Unable to Retain the Services of Dr. John W. Whitney or If We Are Unable to Successfully Recruit Qualified Personnel Having Experience in Business, We May Not Be Able to Continue Our Operations.

Our success depends to a significant extent upon the continued service of Dr. John W. Whitney, our current President, Treasurer and Director. Loss of the services of Dr. Whitney could have a material adverse effect on our growth, revenues, and prospective business. However, Dr. Whitney is bound by several confidentiality agreements, which specifically include non-compete clauses. We have applied for a "key man" life insurance policy on the life of Dr. Whitney in the amount of \$5,000,000. In addition, in order to successfully implement and manage our business plan, we will be dependent upon, among other things, successfully recruiting qualified personnel having experience in business. Competition for qualified individuals is intense. There can be no assurance that we will be able to find, attract and retain existing employees or that we will be able to find, attract and retain qualified personnel on acceptable terms.

If We Are Not Able to Successfully Market and Gain Public Awareness of Our Products and Services, We May Sustain Substantial Losses Which Could Require Us to Curtail or Cease Our Operations.

The production of photochemical fertilizer for commercial and consumer applications is a new business concept characterized by competition with established fertilizer manufacturers who have historically produced products that have heretofore fulfilled the market demand. Achieving market awareness and acceptance for products being introduced and under development requires substantial marketing efforts and expenditure of significant marketing and advertising funds. There is uncertainty as to the rate of sales expansion and the degree of market acceptance of our products. Because of this, we are currently developing and evaluating, and anticipate that we will continue to develop, marketing and advertising for such new products or services; we will devote resources, financial and otherwise to such efforts. The failure of these efforts could result in substantial losses.

Our Success is Dependant on The Ability of Our Products and Services to Compete in Our Various Industries.

We operate in three highly competitive industries which have been characterized by pricing pressures, business consolidations, and flat or low growth trends in revenues and sales. Each of the industries in which we are operating has its own competitive characteristics. The mining technical services segment is somewhat dependent on metals prices in relation to production costs; the industry is under price pressure and consolidations are occurring. The need for technical services in this environment is reduced for certain types of services, but increased for others. There is increased competition from foreign firms who have exchange rate differentials that provide them a competitive advantage in provision of certain services. Our photochemical recycling segment operates in the photowaste hauling and disposal industry. A few large service companies and a few smaller regional companies characterize this industry. Expansion into international markets will also bring direct competition from foreign firms. The photochemical recycling segment also operates in the fertilizer industry. The fertilizer market consists of “Specialty Agriculture Market”, the “Bulk Field Crop Market”, and the “Urban Fertilizer Market”. We are currently concentrating on increasing bulk GOLD’N GRO fertilizer sales, primarily in the Specialty Agriculture and the Bulk Field Crops markets. The fertilizer markets are mature and dominated by a few large manufacturers and distributors. The western U.S. distributor for the GOLD’N GRO fertilizers is one of these companies. Because the markets are mature, the rate of growth to be achieved when introducing new products is uncertain because of the need to displace existing products.

Our markets are not characterized by rapid technological change. These industries are characterized by the need to make large capital investments in order to be participants. This limits the rate of technological change and makes it more difficult for entry by new competitors. Prior to our photochemical recycling technology development, the recovery and disposal of hazardous photochemical waste was characterized by low or limited technology and consisted primarily of hauling and dumping the chemical for a fee. Most of the existing companies recover and sell a portion of the contained silver. The main risk is price fluctuations in the silver market.

The fertilizer industry is stable and new product development and introduction is a long-term process. The reason is that crops grow on seasonal cycles and crop nutrition is complex and affected by many factors. It takes years to develop a new fertilizer product due to the complexity of the plant nutrition process. Because of this, innovation in the fertilizer nutrient product market is low. Now that some of our products and nutrition programs are being introduced into the marketplace, there is no assurance that we will be able to maintain our product development lead if companies with larger resources decide to attempt to produce products that duplicate some of the characteristics of our products.

Our Success is Dependant Upon Regulatory Enforcement of the Waste Control Environment.

Regulatory enforcement of the waste control environment is critical to our competitive position by making it more difficult for service companies with minimal compliance to operate and offer lower pricing. Generally, all 50 states continue to strengthen their regulatory enforcement but our competitive position in obtaining liquid photowastes, the basic process raw material, is somewhat dependent on the continuation of regulations and regulatory enforcement. Similar regulatory enforcement may not be available to us to aid in establishing and developing our international operations.

Our Success is Dependant Upon Our Ability to Adequately Protect Our Trade Secrets, Know-How, Patents and Trademarks.

We own the Itronics logo and name pursuant to common law and "GOLD'n GRO" is a registered trademark. We have only four patents with respect to our technology. Where patent protection is not available, we rely for protection of our intellectual property on trade secret law and nondisclosure and confidentiality agreements with our employees and others. There can be no assurance that such agreements will provide meaningful protection for our trade secrets or proprietary know-how in the event of any unauthorized use or disclosure of such trade secrets or know-how. In addition, others may obtain access to or independently develop technologies or know-how similar to ours.

Our success will also depend on our ability to avoid infringement of patent or other proprietary rights of others. We are not aware that we are infringing any patent or other such rights, nor are we aware of proprietary rights of others for which we will be required to obtain a license in order to develop our products. However, there can be no assurance that we are not infringing proprietary rights of others, or that we will be able to obtain any technology licenses we may require in the future.

We Rely on Contractual Relationships With Our Key Suppliers, Vendors, Customers and Consultants. A Loss of One or More of These Contractual Relationships, Our Ability to Maintain or Increase Revenues Could Be Adversely Affected.

We rely on contractual relationships with our key suppliers, vendors, customers and consultants ("Key Contacts"). If we were to lose these Key Contacts, our ability to maintain or increase revenues could be adversely affected. While we believe our relationship with our Key Contacts is good, there can be no assurance that any relationship will continue to exist.

Our Fertilizer Sales Are Dependent Upon Our Contract With Western Farm Service, Inc., Which Accounted for \$989,084, or 97% of 2004 Fertilizer Sales. The Loss of This Contract Could Cause Us to Cease Operations.

In March 1998 we signed a definitive licensing, manufacturing, and distribution agreement with Western Farm Service, Inc. (WFS), a wholly owned subsidiary of Agrium, Inc. (a NYSE company) to market our GOLD'n GRO fertilizer products. The five-year agreement, with optional five-year renewal periods, was extended for another five years in March 2003. After the initial five year period, the contract may be terminated by either party in any subsequent year by giving the other party written notice 120 days prior to December 31st of each year. Substantially all of our fertilizer sales (97%, or an aggregate of \$989,084 during 2004) are to WFS and we would be materially adversely affected if the contract were terminated. Any such termination may cause us to curtail or cease operations.

Our Photochemical Recycling and Related Silver Refining Revenue Were Dependent on Our Contract with Shutterfly, Inc., Which Accounted for \$201,291, or 59%, of Such 2004 Revenue. Shutterfly, Inc. Also Supplied 65% of Our Used Photochemicals Which We Use as a Raw Material in our GOLD'n GRO Fertilizer Products.

We entered into our standard recycling services contract with Shutterfly, Inc., a private company in the digital imaging and processing industry, in July 2001. In December 2004, our photochemical recycling services provided to Shutterfly, Inc. were discontinued by mutual agreement. Due to the nature of our business, our photochemical recycling customers are also suppliers of our used photochemical raw material needed for fertilizer manufacturing. This raw material is the primary ingredient that distinguishes our GOLD'n GRO fertilizer products from competing fertilizer products. If we are unable to find new customers to replace the lost volume of used photochemicals, we would use up our present inventory of used photochemicals which would limit fertilizer sales to less than our present volumes. If this were to occur, we would be prevented from expanding fertilizer sales to a level required to become profitable, resulting in continuing substantial losses.

Our Mining Technical Services Revenues Were Dependent Upon Our Contract With Golden Phoenix Minerals, Inc., Which Accounted for \$224,039, or 75% of Such Revenue.

We entered into a three year contract with Golden Phoenix Minerals, Inc. (GPXM), a publicly traded precious metal mining company, in March 1999 to provide consulting services. The contract was renewed for another three years in March 2002 and expired in March 2005 and was not renewed.

A Substantial Portion of Our Accounts Receivables Are Due From Western Farm Service, Inc. (WFS)

As of June 30, 2005, \$132,862, or 84% of our total accounts receivables were due to us from WFS. If WFS became unable or unwilling to pay the amounts due, we would be materially adversely affected.

We Are in Default on Substantially All of Our Equipment Leases, Which if Not Settled, Could Result in the Repossession of Certain Equipment and Cause Us to Cease Operations

As of October 31, 2005, delinquent payments on our equipment leases totaled approximately \$540,000. As discussed in the Legal Proceedings section, many of these leases are subject to ongoing litigation or the lessor has received a judgment. The creditors with judgments may seize the secured equipment and/or other assets at any time without notice. Also as discussed in the Legal Proceedings section, we have renegotiated several other leases. These leases are subject to stipulated judgments that allow the lessor to repossess the secured equipment and/or seize other assets without further court action if we become delinquent on future payments. The loss of our equipment could cause us to cease operations.

We Are Refocusing Our Technical Services Segment to Include an Internet Information Portal to Support That Division. We Do Not Know If, or How Long, It Will Be Before Revenue Will Sustain Current Spending Levels. Additional Substantial Losses Could Occur.

The redirection of Whitney & Whitney, Inc. to reduce emphasis on technical consulting services and to launch an Internet information portal is brought about by the fact that Dr. Whitney, our President, has often been the lead person in generating new consulting contracts. Our President's increased responsibilities for managing the expanding photochemical recycling segment and overall corporate activities has reduced his time availability to actively participate in the consulting segment. The main risk in establishing the information portal is the length of time and the related support costs that will be expended during the time needed to get subscriptions to a break- even level.

We do not know if, or how long, it will be before revenue will sustain current spending levels. If it takes a long period of time to launch our Internet information portal and if we expend substantial support costs with respect to such reconfiguration without realizing any revenues related thereto, additional substantial losses could occur.

The EPA Registration Process for GOLD'n GRO Guardian Animal Repellent Will Be Lengthy and Expensive. There is No Guarantee That the Product Will Be Approved By the EPA and There Is No Guarantee That The Product Will Be Accepted In the Markets We Are Targeting. If Our Registration is Not Approved or if This

Product is Not Accepted in the Markets Which We Are Targeting, Substantial Losses Could Occur.

Registration of GOLD'n GRO Guardian with the Federal EPA, followed by registration in each state in which it will be sold, is necessary before the product can be sold in any state. The product is an animal repellent fertilizer and represents a new category of fertilizer for us. Our main risk is that the registration may take longer than anticipated, and that the cost could be higher than presently budgeted. After registration is complete, normal market introduction timing of 2 to 3 years can be expected, and there is always the risk that another company with superior resources may develop a similar product. The revenues to be generated by product sales, after the product is registered, are expected to be supplemental to the regular GOLD'n GRO fertilizer sales but could grow to become a significant part of total fertilizer sales within a few years after introduction.

There is no assurance that the registration of GOLD'n GRO Guardian will be approved or that even if approved, that this product will be accepted in the markets which we are targeting. If our registration is not approved or if GOLD'n GRO Guardian is not accepted in the marketplace, substantial losses could occur.

Any Future Acquisitions Could Disrupt Our Existing Business and Harm Our Financial Position.

An element of our growth strategy includes the acquisition of companies which we believe have synergistic business models. Acquisitions entail a number of risks that could materially and adversely affect business and operating results. Such risks would include problems integrating the acquired operations, technologies or products; diversion of management's time and attention from core businesses; difficulties in retaining business relations with suppliers and customers of the acquired company; risks associated with entering markets in which our management lacks prior experience, and potential loss of key employees from the acquired company.

Risks Relating to Our Current Financing Arrangement:

If We Fail to Obtain Stockholder Approval to Increase our Authorized Shares of Common Stock, We May be Subject to Various Penalties and Will be in Default of the Securities Purchase Agreement.

We presently do not have an adequate amount of authorized and unissued shares of common stock to issue upon the conversion of the secured convertible notes and the exercise of the warrants in connection with the July 2005 Securities Purchase Agreement. As of November 4, 2005, there were 197,057,628 shares of common stock outstanding. We filed a proxy statement on Schedule 14A with the Securities and Exchange Commission on August 31, 2005 and hold a special meeting of our stockholders pursuant to which we will ask our stockholders to approve an amendment to our certificate of incorporation to increase our authorized common stock from 250,000,000 shares to 1,000,000,000 shares. In the event that we are unable to obtain an increase in our authorized common stock, we will be required to pay penalties to the investors of the July 2005 Securities Purchase Agreement and will be in default of the agreement. If we are in default, we will be required to repay the secured convertible notes. If we are required to repay the secured convertible notes, we would be required to use our limited working capital and raise additional funds. If we were unable to repay the notes when required, the note holders could commence legal action against us and foreclose on all of our assets to recover the amounts due. Any such action would require us to curtail or cease operations

There Are a Large Number of Shares Underlying Our Secured Convertible Notes and Warrants That May be Available for Future Sale and the Sale of These Shares May Depress the Market Price of Our Common Stock.

As of November 4, 2005, we had 197,057,628 shares of common stock issued and outstanding, 7,193,639 common shares to be issued to management and other employees for unpaid salary and accrued interest in the amount of \$578,230, unsecured convertible notes outstanding that may be converted into an estimated 21,427,057 shares of common stock at conversion prices ranging from \$0.125 to \$1.18, outstanding warrants to purchase 25,695,183 shares of common stock at exercise prices ranging from \$0.075 to \$0.24, and outstanding compensatory options to purchase 6,106,000 shares of common stock at exercise prices ranging from \$0.15 to \$0.90 per share. We also have secured convertible notes outstanding, and are obligated to issue secured convertible notes, that may be converted into an estimated 196,969,697 shares of common stock at current market prices and related warrants to purchase 3,000,000 shares of common stock at an exercise \$0.15 per share. In addition, the number of shares of common stock issuable upon conversion of the outstanding secured convertible notes may increase if the market price of our stock declines. All of the shares, including all of the shares issuable upon conversion of the secured convertible notes and upon exercise of our warrants, may be sold without restriction. The sale of these shares may adversely affect the market price of our common stock.

The Continuously Adjustable Conversion Price Feature of Our Secured Convertible Notes Could Require Us to Issue a Substantially Greater Number of Shares, Which Will Cause Dilution to Our Existing Stockholders.

Our obligation to issue shares upon conversion of our secured convertible notes is essentially limitless. The following is an example of the amount of shares of our common stock that are issuable, upon conversion of the principal amount of our secured convertible notes, based on market prices 25%, 50% and 75% below the market price as of August 24, 2005 of \$0.08.

% Below Market	Price Per Share	With Discount at 45%	Number of Shares Issuable	% of Outstanding Stock
25%	\$0.06	\$0.033	98,484,848	33.34%
50%	\$0.04	\$0.022	147,727,273	42.86%
75%	\$0.02	\$0.011	295,454,545	60.01%

As illustrated, the number of shares of common stock issuable upon conversion of our secured convertible notes will increase if the market price of our stock declines, which will cause dilution to our existing stockholders.

The Continuously Adjustable Conversion Price Feature of our Secured Convertible Notes May Have a Depressive Effect on the Price of Our Common Stock.

The secured convertible notes are convertible into shares of our common stock at a 45% discount to the trading price of the common stock prior to the conversion. The significant downward pressure on the price of the common stock as the selling stockholders convert and sell material amounts of common stock could have an adverse effect on our stock price. In addition, not only the sale of shares issued upon conversion or exercise of secured convertible notes and warrants, but also the mere perception that these sales could occur, may adversely affect the market price of the common stock.

The Issuance of Shares Upon Conversion of the Secured Convertible Notes and Exercise of Outstanding Warrants May Cause Immediate and Substantial Dilution to Our Existing Stockholders.

The issuance of shares upon conversion of the secured convertible notes and exercise of warrants may result in substantial dilution to the interests of other stockholders since the selling stockholders may ultimately convert and sell the full amount issuable on conversion. Although AJW Partners, LLC, AJW Qualified Partners, LLC, AJW Offshore, Ltd., and New Millennium Partners II, LLC may not convert their secured convertible notes and/or exercise their warrants if such conversion or exercise would cause them to own more than 4.99% of our outstanding common stock, this restriction does not prevent AJW Partners, LLC, AJW Qualified Partners, LLC, AJW Offshore, Ltd., and New Millennium Partners II, LLC from converting and/or exercising some of their holdings and then converting the rest of their holdings. In this way, AJW Partners, LLC, AJW Qualified Partners, LLC, AJW Offshore, Ltd., and New Millennium Partners II, LLC could sell more than this limit while never holding more than this limit. There is no upper limit on the number of shares that may be issued which will have the effect of further diluting the proportionate equity interest and voting power of holders of our common stock, including investors in this offering.

In The Event That Our Stock Price Declines, The Shares Of Common Stock Allocated For Conversion Of The Secured Convertible Notes and Registered Pursuant To This Prospectus May Not Be Adequate And We May Be Required to File A Subsequent Registration Statement Covering Additional Shares. If The Shares We Have Allocated And Are Registering Herewith Are Not Adequate And We Are Required To File An Additional Registration Statement, We May Incur Substantial Costs In Connection Therewith.

Based on our current market price and the potential decrease in our market price as a result of the issuance of shares upon conversion of the secured convertible notes, we have made a good faith estimate as to the amount of shares of common stock that we are required to register and allocate for conversion of the secured convertible notes. Accordingly, we have allocated 196,969,697 shares to cover the conversion of the secured convertible notes. In the event that our stock price decreases, the shares of common stock we have allocated for conversion of the secured convertible notes and are registering hereunder may not be adequate. If the shares we have allocated to the registration statement are not adequate and we are required to file an additional registration statement, we may incur substantial costs in connection with the preparation and filing of such registration statement.

If We Are Required for any Reason to Repay Our Outstanding Secured Convertible Notes, We Would Be Required to Deplete Our Working Capital, If Available, Or Raise Additional Funds. Our Failure to Repay the Secured Convertible Notes, If Required, Could Result in Legal Action Against Us, Which Could Require the Sale of Substantial Assets.

In July 2005, we entered into a Securities Purchase Agreement for the sale of an aggregate of \$3,250,000 principal amount of secured convertible notes. The secured convertible notes are due and payable, with 8% interest, three years from the date of issuance, unless sooner converted into shares of our common stock. Although we currently have \$1,250,000 secured convertible notes outstanding, the investors are obligated to purchase additional secured convertible notes in the aggregate of \$2,000,000. In addition, any event of default such as our failure to repay the principal or interest when due, our failure to issue shares of common stock upon conversion by the holder, our failure to timely file a registration statement or have such registration statement declared effective, breach of any covenant, representation or warranty in the Securities Purchase Agreement or related convertible note, the assignment or appointment of a receiver to control a substantial part of our property or business, the filing of a money judgment, writ or similar process against our company in excess of \$50,000, the commencement of a bankruptcy, insolvency, reorganization or liquidation proceeding against our company and the delisting of our common stock could require the early repayment of the secured convertible notes, including a default interest rate of 15% on the outstanding principal balance of the notes if the default is not cured with the specified grace period. We anticipate that the full amount of the secured convertible notes will be converted into shares of our common stock, in accordance with the terms of the secured convertible notes. If we were required to repay the secured convertible notes, we would be required to use our

limited working capital and raise additional funds. If we were unable to repay the notes when required, the note holders could commence legal action against us and foreclose on all of our assets to recover the amounts due. Any such action would require us to curtail or cease operations.

If an Event of Default Occurs under the Securities Purchase Agreement, Secured Convertible Notes, Warrants, Security Agreement or Intellectual Property Security Agreement, the Investors Could Take Possession of all Our Goods, Inventory, Contractual Rights and General Intangibles, Receivables, Documents, Instruments, Chattel Paper, and Intellectual Property.

In connection with the Securities Purchase Agreements we entered into in July 2005, we executed a Security Agreement and an Intellectual Property Security Agreement in favor of the investors granting them a first priority security interest in all of our goods, inventory, contractual rights and general intangibles, receivables, documents, instruments, chattel paper, and intellectual property. The Security Agreements and Intellectual Property Security Agreements state that if an even of default occurs under the Securities Purchase Agreement, Secured Convertible Notes, Warrants, Security Agreements or Intellectual Property Security Agreements, the Investors have the right to take possession of the collateral, to operate our business using the collateral, and have the right to assign, sell, lease or otherwise dispose of and deliver all or any part of the collateral, at public or private sale or otherwise to satisfy our obligations under these agreements.

Risks Relating to Our Common Stock:

If We Fail to Remain Current on Our Reporting Requirements, We Could be Removed From the OTC Bulletin Board Which Would Limit the Ability of Broker-Dealers to Sell Our Securities and the Ability of Stockholders to Sell Their Securities in the Secondary Market.

Companies trading on the OTC Bulletin Board, such as us, must be reporting issuers under Section 12 of the Securities Exchange Act of 1934, as amended, and must be current in their reports under Section 13, in order to maintain price quotation privileges on the OTC Bulletin Board. If we fail to remain current on our reporting requirements, we could be removed from the OTC Bulletin Board. As a result, the market liquidity for our securities could be severely adversely affected by limiting the ability of broker-dealers to sell our securities and the ability of stockholders to sell their securities in the secondary market.

Our Common Stock is Subject to the "Penny Stock" Rules of the SEC and the Trading Market in Our Securities is Limited, Which Makes Transactions in Our Stock Cumbersome and May Reduce the Value of an Investment in Our Stock.

The Securities and Exchange Commission has adopted Rule 15g-9 which establishes the definition of a "penny stock," for the purposes relevant to us, as any equity security that has a market price of less than \$5.00 per share or with an exercise price of less than \$5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, the rules require:

- that a broker or dealer approve a person's account for transactions in penny stocks; and
- the broker or dealer receive from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased.

In order to approve a person's account for transactions in penny stocks, the broker or dealer must:

- obtain financial information and investment experience objectives of the person; and
- make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the Commission relating to the penny stock market, which, in highlight form:

- sets forth the basis on which the broker or dealer made the suitability determination; and
- that the broker or dealer received a signed, written agreement from the investor prior to the transaction.

Generally, brokers may be less willing to execute transactions in securities subject to the "penny stock" rules. This may make it more difficult for investors to dispose of our common stock and cause a decline in the market value of our stock.

Disclosure also has to be made about the risks of investing in penny stocks in both public offerings and in secondary trading and about the commissions payable to both the broker-dealer and the registered representative, current quotations for the securities and the rights and remedies available to an investor in cases of fraud in penny stock transactions. Finally, monthly statements have to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks.

USE OF PROCEEDS

This prospectus relates to shares of our common stock that may be offered and sold from time to time by the selling stockholders. We will not receive any proceeds from the sale of shares of common stock in this offering. However, we will receive the sale price of any common stock we sell to the selling stockholder upon exercise of the warrants. We expect to use the proceeds received from the exercise of the warrants, if any, for general working capital purposes. However, AJW Partners, LLC, AJW Qualified Partners, LLC, AJW Offshore, Ltd., and New Millennium Partners II, LLC will be entitled to exercise up to 3,000,000 warrants on a cashless basis if the shares of common stock underlying the warrants are not then registered pursuant to an effective registration statement. In the event that AJW Partners, LLC, AJW Qualified Partners, LLC, AJW Offshore, Ltd., or New Millennium Partners II, LLC exercise the warrants on a cashless basis, then we will not receive any proceeds from the exercise of those warrants. In addition, we have received gross proceeds \$1,250,000 from the sale of the secured convertible notes and the investors are obligated to provide us with an additional \$2,000,000; \$1,000,000 within five days of the filing of this registration statement, and \$1,000,000 within five days of this prospectus being declared effective. The proceeds received from the sale of the secured convertible notes will be used for business development purposes, working capital needs, pre-payment of interest, payment of finder's and legal fees and payment of indebtedness.

MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our common stock is quoted on the OTC Bulletin Board under the symbol "ITRO."

For the periods indicated, the following table sets forth the high and low bid prices per share of common stock. These prices represent inter-dealer quotations without retail markup, markdown, or commission and may not necessarily represent actual transactions.

	High(\$)	Low (\$)
Fiscal Year		
2003		
First Quarter	0.16	0.09
Second Quarter	0.14	0.08
Third Quarter	0.23	0.11
Fourth Quarter	0.17	0.11
Fiscal Year		
2004		
First Quarter	0.22	0.14
Second Quarter	0.17	0.10
Third Quarter	0.10	0.06
Fourth Quarter	0.08	0.05
Fiscal Year		
2005		
First Quarter	0.13	0.05
Second Quarter	0.08	0.05
	0.08	0.06

Third Quarter
(1)

(1) Through August 24, 2005

HOLDERS

As of August 24, 2005, we had approximately 1,081 holders of our common stock. The number of record holders was determined from the records of our transfer agent and does not include beneficial owners of common stock whose shares are held in the names of various security brokers, dealers, and registered clearing agencies. The transfer agent of our common stock is Securities Transfer Corporation, 2591 Dallas Parkway, Suite 102, Frisco, Texas 75034.

We have never declared or paid any cash dividends on our common stock. We do not anticipate paying any cash dividends to stockholders in the foreseeable future. In addition, any future determination to pay cash dividends will be at the discretion of the Board of Directors and will be dependent upon our financial condition, results of operations, capital requirements, and such other factors as the Board of Directors deem relevant.

12

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Some of the information in this prospectus contains forward-looking statements that involve substantial risks and uncertainties. You can identify these statements by forward-looking words such as "may," "will," "expect," "anticipate," "believe," "estimate" and "continue," or similar words. You should read statements that contain these words carefully because they:

- discuss our future expectations;
- contain projections of our future results of operations or of our financial condition; and
- state other "forward-looking" information.

We believe it is important to communicate our expectations. However, there may be events in the future that we are not able to accurately predict or over which we have no control. Our actual results and the timing of certain events could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including those set forth under "Risk Factors," "Business" and elsewhere in this prospectus. See "Risk Factors."

General Overview

We are the inventor and developer of the "Beneficial Use Photochemical, Silver, and Water Recycling" technology that produces environmentally beneficial GOLD'n GRO fertilizers and silver bullion.

We are a process technology company that has developed what we believe is a unique technology for photochemical recycling. We, through our subsidiary, Itronics Metallurgical, Inc., extract more than 99% of the silver and virtually all of the other toxic heavy metals from used photoliquids and 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 silver bullion. We also provide process planning and technical services to the mining industry.

Our fertilizer is sold primarily through Western Farm Service, Inc. (WFS), a wholly owned subsidiary of Agrium, Inc. (a NYSE company). Our distribution agreement with WFS gives them exclusive rights to sell our fertilizer products in Arizona, California, Hawaii, Idaho, Oregon, and Washington, which represented 97% of our fertilizer sales in 2004 and 93% of our sales in 2003. This agreement is discussed in more detail in the Business section. Our plans to increase GOLD'n GRO fertilizer sales, including plans to expand the product line, expand to more geographical regions in the U.S., enter new market segments, and add new distributors, are discussed in more detail in the Growth Plan and Implementation section.

We obtain a significant portion of our raw materials to manufacture fertilizer from used photoliquids. A byproduct of our fertilizer manufacturing process is silver. We sell three types of silver: silver bullion, 5 troy ounce 99.9% pure Silver Nevada Miner numismatic bars, and recycled film containing silver. Our processed silver bullion is sold to a commercial refiner under standard industry terms, which include pricing the silver based on published market quotes and applicable service fees. The Silver Nevada Miner bars sell to the consumer collectibles market. Recycled film is primarily X-ray film from hospitals that we sort and sell to a commercial film recycler; we are paid based on the value of contained silver, 45 to 60 days after shipment.

Our fertilizer manufacturing process uses several commodities. We separate silver from photochemicals, then we add zinc and other raw materials to the demetallized liquid to make our fertilizer formulations. Prices for fertilizer raw materials are generally increasing over time. We maintain limited quantities of these commodities and purchase them on a just in time basis. When prices of these commodities rise, we pass this cost on to our customers, so commodity price fluctuations have not had a significant impact on our results of operations.

The majority of our raw material inventory is comprised of silver in photochemical solutions. The table below indicates that silver prices were relatively stable in 2001 to 2003, then rose dramatically in 2004 and 2005. We regularly compare our weighted average cost of silver per ounce to current market prices; historically we have not had impairment losses. The average London spot price of silver is shown as follows:

	Year				6 mos June 30,
Year	2001	2002	2003	2004	2005
Silver	\$4.36	\$4.60	\$4.88	\$6.67	\$7.06

We also provide consulting services to the mining industry. To supplement this business line, we recently launched an internet website which we plan to maintain with existing professional staff. Our plans with regard to the website are discussed more fully in the Growth Plan and Implementation section below.

Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States requires that management make a number of assumptions and estimates that affect the reported amounts of assets, liabilities, revenues and expenses in our consolidated financial statements and accompanying notes. Management bases its estimates on historical information and assumptions believed to be reasonable. Although these estimates are based on management's best knowledge of current events and circumstances that may impact the Company in the future, actual results may differ from these estimates.

Our critical accounting policies are those that affect our financial statements materially and involve a significant level of judgment by management.

Revenue Recognition.

We operate two divisions: Photochemical Fertilizer and Technical Services. Within the fertilizer division, revenue is derived from three sources (1) sales of fertilizer, (2) photochemical recycling including pick up and transportation of photochemical waste and sales of Photochemical Silver Concentrators, and (3) sales of silver. Revenue from the sale of fertilizer, Photochemical Silver Concentrators, and silver is recognized in income when the goods are shipped. Returns since inception have been nominal; therefore, the Company has not established a returns allowance. Photochemical recycling fees are recognized in income after the used photochemical solution is removed from our customer sites and transported to our manufacturing facility.

Within the technical services division, revenue is derived from consulting services. Revenue is recognized in income as services are rendered. When the Company is responsible for subcontractor services and related expenses, such pass-through costs are included in both revenue and cost of revenues. Markups, if any, are included in revenues.

Inventory.

Inventory is carried on the balance sheet at the lower of cost or market value using the average cost valuation method. Because a large part of our inventory is silver contained in used photochemical solution and the market value of silver changes daily on the commodities market, we regularly monitor the carrying value of our silver in solution inventory to ensure it is carried at the lower of cost or its current market value. If silver on the open market were less than our carrying value, then we would write down the carrying value of our inventory by reducing recorded inventory and increasing cost of sales. If the amount of the write down were material, we would separately include the item in our statement of operations.

Recent Accounting Pronouncements

On December 16, 2004 the FASB issued SFAS No. 123R, "Share-Based Payment," which is an amendment to SFAS No. 123, "Accounting for Stock-Based Compensation." This new standard eliminates the ability to account for share-based compensation transactions using Accounting Principles Board, or APB, Opinion No. 25, "Accounting for Stock Issued to Employees," and generally requires such transactions be accounted for using a fair-value-based method and the resulting cost recognized in our financial statements. This new standard is effective for awards that are granted, modified or settled in cash in interim and annual periods beginning after June 15, 2005, December 15, 2005 for small business issuers. In addition, this statement will apply to unvested options granted prior to the effective date. The Company will adopt this new standard effective for the first fiscal quarter of 2006 and it has not yet determined what impact this standard will have on its financial position or results of operations.

In November 2004, the FASB issued SFAS No. 151, "Inventory Costs: an amendment of ARB No. 43, Chapter 4," to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs and wasted material. SFAS No. 151 is effective for inventory costs incurred during fiscal years beginning after June 15, 2005. We do not believe the provisions of SFAS No. 151, when applied, will have a material impact on our financial position or results of operations."

Results of Operations

The primary factors affecting our revenue fluctuation between periods in fertilizer sales are seasonality and weather conditions. Sales are greater during the growing season, and are adversely affected by inclement weather. Additionally, we have experienced varying lengths of time for acceptance in the market of our new fertilizer products;

farmers are inherently very slow to accept new products so market penetration time can be lengthy. Our short history in the fertilizer market demonstrates new products, if successful, obtain meaningful sales typically between two and four years after product launch.

The primary factor affecting the revenue fluctuation between periods in photochemical recycling revenue is our desire to acquire this material for use in fertilizer production and our ability to store this material until it is needed.

The primary factor affecting the revenue fluctuation between periods in sales of silver bullion is our dependence on the timing of processing used photochemical wastes, which is primarily dependent on fertilizer manufacturing and related sales.

Comparison of the Year Ended December 31, 2004 with the Year Ended December 31, 2003

We 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%. We 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 our two operating segments.

PHOTOCHEMICAL FERTILIZER

	Year Ended December 31,	
	2004	2003
Revenue		
Fertilizer	\$ 1,019,789	\$ 554,320
Photochemical recycling	\$ 301,609	\$ 327,306
Silver	\$ 101,531	\$ 55,287
Total Segment 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 (1,829 tons) and \$554,300 (944 tons) for 2004 and 2003, respectively. This represents an increase of 84% in dollars and 94% in tonnage. Our fertilizer product sales are presently grouped into two primary categories, Chelated Liquid Micro-nutrients and Chelated Liquid Multi-nutrients. The Micro-nutrient category includes five products, which includes the two zinc products, GOLD'n GRO 9-0-1+7% Zinc and GOLD'n GRO 9-0-2+3% Zinc. These zinc products were introduced in 2001 and 2004, respectively. The Multi-nutrient category has a total of six products, which includes the GOLD'n GRO 4-0-9+6.6% Sulphur Base Liquid, which was introduced in 2003. Sales of Micro-nutrients were \$873,600 (1,399 tons) and \$474,500 (808 tons) for 2004 and 2003, respectively, an increase of 84% in dollars and 73% in tonnage. Sales of the Multi-nutrients were \$125,700 (430 tons) and \$47,800 (136 tons) for 2004 and 2003, respectively, an increase of 163% in dollars and an increase of 216% in tonnage. The dollar and tonnage increases are primarily attributable to increased bulk sales of the GOLD'n GRO 9-0-1+7% Zinc, but meaningful sales were also achieved with the GOLD'n GRO 9-0-2+3% Zinc and the GOLD'n GRO 4-0-9+6.6% Sulphur. Sales tonnage rose faster than sales dollars in spite of a modest price increase in the second quarter of 2004 because of the increase in tonnage of the Chelated Liquid Multi-nutrients which sell at lower prices. The overall increase in sales tonnage is primarily due to the acceptance of our products by more of WFS' retail branches due to successful field results over the past three years, and to a lesser extent on the introduction of the two new products.

Photochemical recycling revenue was \$301,600 and \$327,300 in 2004 and 2003, respectively, a decrease of 8%. The recycling service fee portion of this revenue category increased \$46,200. The increase is attributable to the rapid growth of Shutterfly, Inc., a digital imaging and processing company. This increase was offset by a reduction in sales of Photochemical Silver Concentrators. In 2004 we sold one Concentrator for \$20,000 compared to two sold in 2003 for a total of \$91,900. Photochemical Silver Concentrators have widely varying prices, depending on the needs of the customer. Consequently, sales volumes and amounts are not consistent from period to period.

In December 2004, photochemical recycling services provided to Shutterfly, Inc. were discontinued by mutual agreement; the photochemical volume from this customer had been growing so rapidly that the supply was exceeding our need for the chemicals in fertilizer manufacturing, resulting in storage costs and plant inefficiencies. Shutterfly accounted for \$201,300 or 59% of 2004 photochemical recycling revenue. In the near term, this will result in reduced photochemical recycling revenue.

We previously developed statistical 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 fertilizers, this is enough volume to support manufacture and sale of more than 200 million gallons of liquid fertilizer products, or about 1 million tons, so we believe the raw material is available in the market to meet future manufacturing needs. We estimate that current supplies of photochemical raw material in storage, combined with ongoing receipts of material from other existing customers, is sufficient to meet fertilizer production needs for the next twelve to eighteen months, depending on fertilizer sales volumes.

We are in contact with both small and large photochemical generators, and are actively marketing Photochemical Silver Concentrators. The concentrators allow us to receive the raw materials needed to manufacture our fertilizer in much smaller volume, resulting in a higher content of chemicals desirable for fertilizer manufacturing, reducing the storage problems we were facing. The Photochemical Silver Concentrators are manufactured under contract by a third party to meet the specifications of each customer. Concentrators typically sell for \$20,000 to \$200,000, so part of the loss in photochemical recycling service revenues is expected to be offset by growth in Photochemical Silver Concentrator sales in future years.

During the first quarter of 2005 we received an order for two Concentrators and requests for proposal from several other 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 our photochemical raw materials by receiving concentrated material through the interstate commercial trucking system.

Edgar Filing: ITRONICS INC - Form SB-2/A

Silver revenue was \$101,500 and \$55,300 for 2004 and 2003, respectively, an increase of \$46,200, or 84%. Of this increase, \$18,500 was from the sale of Silver Nevada Miner silver bars and \$16,700 was from the sale of silver in recycled film.

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 \$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,	
	2004	2003
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%. The number of clients we serve and the amount of work needed by those clients varies from period to period.

On March 1, 2005 the technical services contract with Golden Phoenix Minerals, Inc. 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 we closed the satellite office for technical services and reduced staff the equivalent of approximately three people.

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. 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 \$169,000 for 2004, compared to \$456,500 in 2003, a decline of \$287,500. The decline is due to decreased gain on sale of GPXM shares 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.

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 our 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 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. We are actively selling our GPXM shares to assist with our working capital needs. Our 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 prospectus does not succinctly summarize the progress that we have made in implementing our business plan and improving our 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 our 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 our 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 us 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. We expect to make further meaningful progress expanding sales and reducing debt in 2005.

Comparison of the Three and Six Months Ended June 30, 2005 with the Three and Six Months Ended June 30, 2004

Results of Operations

We reported consolidated revenues of \$557,328 for the quarter ended June 30, 2005, compared to \$626,170 for the prior year quarter, a decrease of 11%. The decrease was due to a decrease in Photochemical Fertilizer segment revenue of \$49,800, or 9% and to a decrease of \$19,000 in Mining Technical Services segment revenues, a decrease of 36%. The consolidated net loss was \$819,389, or \$0.004 per share, for the quarter ended June 30, 2005, compared to a net loss of \$802,672 or \$0.006 per share for the comparable 2004 period, an increased loss of \$16,700, or 2%. Consolidated revenues for the first six months of 2005 were \$867,301 compared to \$1,033,010 for the prior year period, a decrease of 16%. The consolidated net loss was \$1,732,994 or \$0.009 per share, for the six months ended June 30, 2005, compared to a net loss of \$1,513,289 or \$0.011 per share for the comparable 2003 period, an increased

loss of 15%.

To provide a more complete understanding of the factors contributing to the changes in revenues, operating expenses, other income (expense) and the resultant operating income (loss) and net income (loss) before taxes, the discussion presented below is separated into our two operating segments.

PHOTOCHEMICAL FERTILIZER

	Three months Ended June 30,		Six Months Ended June 30,	
	2005	2004	2005	2004
Revenues				
Fertilizer	\$ 484,664	\$ 476,910	\$ 695,898	\$ 706,389
Photochemical recycling	\$ 19,888	\$ 75,084	\$ 42,069	\$ 129,643
Silver	\$ 19,115	\$ 21,517	\$ 45,874	\$ 64,475
Total Revenue	\$ 523,667	\$ 573,511	\$ 783,841	\$ 900,507
Gross profit (loss)	\$ 20,718	\$ 42,372	\$ (21,446)	\$ 6,733
Operating income (loss)	\$ (494,262)	\$ (508,586)	\$ (1,097,807)	\$ (992,089)
Other income (loss)	\$ (201,722)	\$ (202,325)	\$ (365,774)	\$ (411,095)
Net income (loss) before taxes	\$ (695,984)	\$ (710,911)	\$ (1,463,581)	\$ (1,403,184)

Edgar Filing: ITRONICS INC - Form SB-2/A

Total segment revenues for the second quarter of 2005 were approximately \$523,700, a decrease of 9% from the prior year second quarter. Fertilizer sales for the quarter were \$484,700 (766 tons), compared to \$476,900 (839 tons) for the 2004 second quarter, an increase of 2% in dollars and a decrease of 9% in tonnage. Sales of the Chelated Liquid Micro-nutrients were \$434,700 (625 tons) and \$408,000 (646 tons) for the second quarter of 2005 and 2004, respectively, an increase of 7% in dollars and a decrease of 3% in tonnage. Sales of the Chelated Liquid Multi-nutrients were \$44,000 (141 tons) and \$56,600 (193 tons) for the second quarter of 2005 and 2004, respectively, a decrease of 22% in dollars and 27% in tonnage. The expected fertilizer sales increase did not occur due to rainy weather in the Central Valley of California that continued into late May 2005. Total photochemical recycling revenue for the quarter decreased 74%, on decreased volume of 73%, compared to the second quarter of 2004. The decrease is due to the December 2004 mutual termination of recycling services for Shutterfly, Inc., a significant photochemical recycling customer. To offset this loss of revenue, we are concentrating our efforts on sales of Photochemical Silver Concentrators. Silver sales decreased \$2,400 from the second quarter of 2004, a decrease of 11%. Cost of sales decreased \$28,200 due primarily to a decrease of \$20,700 in payroll and related costs. The segment recorded a gross profit of \$20,700 for the quarter, compared to a gross profit of \$42,400 for the second quarter of 2004, a decreased gross profit of \$21,700, or 51%.

Segment operating expenses decreased \$36,000 from the second quarter of 2004. This resulted from modest decreases in most all of the operating expense categories.

These factors resulted in a 2005 second quarter segment operating loss of \$494,300 compared to a loss of \$508,600 for the second quarter of 2004, a decreased operating loss of \$14,300, or 3%.

Other expense decreased nominally.

The changes in operating loss and other expenses resulted in a segment net loss before taxes of \$696,000 for the quarter ended June 30, 2005, compared to a loss of \$710,900 for the prior year quarter, a decreased loss of \$14,900 or 2%.

For the first six months of 2005, revenues were \$783,800, compared to \$900,500 for the comparable 2004 period, a decrease of 13%. The decline is due primarily to the prior year mutual termination of a significant photochemical recycling customer. Gross loss for the first six months of 2005 was \$21,400, compared to a gross profit of \$6,700 for the comparable prior year period, a decline of \$28,200. Operating loss for the first six months of 2005 was approximately \$1,097,800 compared to \$992,100 for the first six months of 2004, an increased loss of \$105,700, or 11%.

Other expense decreased \$45,300 due to a decrease in interest expense resulting from prior and current year conversions of convertible promissory notes into common stock.

The changes in operating loss and other expenses resulted in a segment net loss before taxes of \$1,463,600 for the six months ended June 30, 2005, compared to a loss of \$1,403,200 for the prior year period, an increased loss of \$60,400 or 4%.

MINING TECHNICAL SERVICES

	Three Months Ended June 30,		Six Months Ended June 30,	
	2005	2004	2005	2004
Revenues	\$ 33,661	\$ 52,659	\$ 83,460	\$ 132,503
Gross profit (loss)	\$ (10,048)	\$ (4,800)	\$ (9,019)	\$ (2,894)
Operating income (loss)	\$ (118,706)	\$ (113,810)	\$ (261,029)	\$ (207,920)
Other income (expense)	\$ (4,699)	\$ 22,049	\$ (8,384)	\$ 97,815
Net income (loss) before taxes	\$ (123,405)	\$ (91,761)	\$ (269,413)	\$ (110,105)

Mining technical services revenue was \$33,700 for the quarter ended June 30, 2005, compared to \$52,700 for the comparable quarter of 2004, a decrease of 36%. The decrease is due to prior year short term projects that did not reoccur in the current period. Cost of sales decreased by \$13,800, due primarily to decreases in labor and consulting costs of \$10,600. These factors resulted in a second quarter gross loss for the segment of \$10,000 compared to a gross loss of \$4,800 for the prior year second quarter, an increased gross loss of \$5,200.

In early May 2005 the technical services satellite office was closed due to the winding down of most of the technical service contracts and completion of the majority of the data gathering for the insidemetals.com project, but certain key staff members have been retained. Programming is continuing for insidemetals.com and launch of the website Information Portal is planned for August 2005.

The redirection of Whitney & Whitney, Inc. to reduce emphasis on technical consulting services and to launch an internet information portal is brought about by the fact that Dr. Whitney, our President, has often been the lead person in generating new consulting contracts. Our President's increased responsibilities for managing the expanding photochemical recycling segment and overall corporate activities has reduced his time availability to actively participate in the consulting segment. Part of our objective in shifting the focus of the technical services segment is to retain our core professional staff that can provide assistance on possible future technical service contracts as well as perform administrative duties for the photochemical recycling segment, while at the same time adding a potential source of revenue that is not dependent upon labor sales and which can be managed by a professional staff. The information portal also better utilizes the Whitney & Whitney, Inc. library and information resources that are already in existence. For the six months ended June 30, 2005 we allocated costs of approximately \$99,000 to the development of the web site. The site was launched in mid-August 2005 and we are now fine-tuning the general presentation of the site, as well as improving the profiled mining company information. We expect this level of spending to continue well into the fourth quarter of 2005. As improvements to the site are completed and information maintenance becomes routine, we will reduce or redirect staff resources as needed.

Total segment operating expenses decreased nominally, but research and development costs increased \$36,100 due to costs related to developing the insidemetals.com project, which was offset by decreases in various other operating expenses.

The combination of these factors resulted in a 2005 second quarter segment operating loss of \$118,700, compared to a loss of \$113,800 for the second quarter of 2004, an increased operating loss of \$4,900, or 4%.

Other income (loss) for the second quarter of 2005 was a loss of \$4,700 compared to a gain of \$22,000 for the prior year second quarter. This decrease is due to reduced sales of common shares of Golden Phoenix Minerals, Inc. and other marketable securities.

The changes in operating loss and other income resulted in a segment net loss before taxes of \$123,400 for the quarter ended June 30, 2005, compared to a loss of \$91,800 for the prior year quarter, an increased loss of \$31,600, or 34%.

For the first six months of 2005, segment revenue totaled \$83,500 compared to \$132,500 for the first six months of 2004, a decrease of 37%. Gross loss for the first six months of 2005 was \$9,000, compared to a gross loss of \$2,900 for the comparable prior year period, an increased gross loss of \$6,100. Operating loss for the period was \$261,000 compared to an operating loss of \$207,900 for the comparable 2004 period, an increased operating loss of \$53,100, or 26%. The primary factor contributing to the decline was research and development costs related to the insidemetals.com project.

Other income (loss) for the first six months of 2005 was a loss of \$8,400 compared to a gain of \$97,800 for the prior year period. This decrease is due to reduced sales of common shares of Golden Phoenix Minerals, Inc. and other marketable securities.

The changes in operating loss and other income resulted in a segment net loss before taxes of \$269,400 for the six months ended June 30, 2005, compared to a net loss of \$110,100 for the prior year period, an increased loss of \$159,300.

SUMMARY

On a consolidated basis, the various changes in revenues and operating expenses resulted in a second quarter 2005 operating loss of \$613,000, compared to \$622,400 for the second quarter of 2004, a decreased operating loss of \$9,400, or 2%. Net loss before taxes for the second quarter 2005 was \$819,400 compared to \$802,700 for the prior year second quarter, an increased loss of \$16,700 or 2%. For the six month period ended June 30, 2005 the operating loss was \$1,358,800 compared to \$1,200,000 for the prior year comparable period, an increased operating loss of \$158,800, or 13%. Net loss before taxes for the six months ended June 30, 2005 was \$1,733,000 compared to \$1,513,300 for the prior year six month period, an increased loss of \$219,700, or 15%.

Changes in Financial Condition; Capitalization

Cash amounted to \$(30,200) as of June 30, 2005, compared to \$21,500 as of June 30, 2004. Net cash used for operating activities was approximately \$852,200 for the first six months of 2005. The cash used for operating activities during the period was financed by a combination of sales of common stock of \$570,000 from a private placement of restricted common stock and attached warrants, short term loans from an officer/stockholder of \$90,000, short term financing of \$125,000, and \$93,100 in inventory and account receivable factoring.

Total assets increased nominally during the six months ended June 30, 2005 to \$4,148,200. Current assets increased \$33,900 due to an increase in marketable securities of \$85,800 due to receipt of the final billings for services to GPXM in their restricted common stock. At June 30, 2005 we owned 567,100 shares of GPXM with a current market value of \$112,000. Net property and equipment decreased \$102,100 due to depreciation and amortization. Other assets

increased \$68,500 due to the acquisition of the product rights of the GOLD'n GRO Guardian fertilizer for \$71,500 in restricted common stock.

Current liabilities increased during the six months ended June 30, 2005 by \$1,754,900 and total liabilities decreased by \$237,400. Total liabilities decreased due to the conversion into common stock of a total of \$882,700 in Convertible Promissory Notes and accrued interest. This decrease was partially offset by current period accrued interest on convertible promissory notes of \$180,000, net short term financing of \$210,000, and inventory and account receivable financing \$93,100. Changes in current liabilities include increases of \$30,200 in bank overdraft, \$32,100 in accounts payable, \$93,100 in account receivable and inventory factoring, \$139,700 in accrued management salaries, \$85,000 in advances from an officer/stockholder, and \$1,739,600 in current maturities of convertible notes and accrued interest. The increase in current maturities of convertible notes is due to the reclassification from long term debt of the 2000 Series Convertible Promissory Notes that were extended to 2006 and are now due within one year of the balance sheet date. These increases were partially offset by decreases of \$76,600 in accrued expenses, which reflect payment of a portion of federal payroll tax obligations, and \$343,600 in current maturities of long term debt, which reflects the reclassification of the mortgage obligation on the Stead manufacturing facility to long term debt.

Addressing our financial condition, improvements have been made. The stockholders' deficit, \$4,587,900 at December 31, 2002, has been reduced to a deficit of \$2,326,700 at June 30, 2005, an improvement of \$2,261,200. This has been achieved by the conversion of approximately \$4.3 million in convertible notes and accrued interest into common stock. One significant area of difficulty for us 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 \$775,000 at June 30, 2005, a reduction of \$418,900. This includes the write off of five leases as debt forgiveness income in 2004 of \$187,800. We expect to make further meaningful progress expanding sales and restructuring debt in 2005.

Liquidity and Capital Resources

During the six months ended June 30, 2005, working capital decreased by \$1,721,100 to a deficit balance of \$4,936,400. The decrease is primarily due to the reclassification from long term debt of a net \$1,739,600 in convertible notes and accrued interest. We have had limited cash liquidity since the third quarter of 2000.

To meet short term cash needs, we factor certain of our receivables. This process enables us to obtain cash immediately upon selling product. We generally receive payment from our customers within 30 days of sales; we then repay the factoring loan. During 2005, we began factoring certain items of inventory; we are thus able to keep raw materials on hand for immediate production upon receipt of an order from our customers. The lender is secured by a blanket UCC on file with the State of Nevada. A UCC form is also filed for individual invoices to further secure the lender.

We have sought and obtained the funding described above, which has not been sufficient to maintain all obligations on a current basis. Other factors limiting cash liquidity include fertilizer sales not expanding at the rate originally anticipated, so operating losses were not reduced as much as expected and the \$15 million equity line of credit agreement with Swartz Private Equities, LLC (Swartz) expired in February 2004. A private placement of stock with attached warrants was closed in June 2005, with \$570,000 received during the six months ended June 30, 2005. In July 2005 we obtained 8% convertible debt financing for up to \$3.25 million, with the final amount dependent upon the filing and effectiveness of a registration statement relating to common shares underlying the convertible debt and warrants issued in the recent financing. The funding will provide for working capital, manufacturing plant expansion, registration of GOLD'n GRO Guardian fertilizer with the EPA, and debt reduction. It is anticipated that this funding will provide for our capital needs through March to June 2006, depending on fertilizer sales growth

There has been a long term commitment by officers and other members of management to support us by investing funds for our growth. One officer/shareholder has invested a total of \$1,403,900 in cash and deferred salary during the period 2001 through June 30, 2005. Two other members of management have deferred salary totaling \$550,500 during the period 2001 through June 30, 2005. Additional members of management invested \$62,000 cash in 2003. All cash and deferred salary that have been invested in our private placements were under the same terms and conditions as all other investors.

We believe that the business plan implementation needs to be accelerated to meet profitability goals and believe that can be accomplished upon obtaining sufficient capital.

The actual rate of growth in fertilizer and the related photochemical and silver sales necessary to achieve profitability is subject to a number of uncertainties, including the annual seasonal nature of fertilizer sales related to crop cycles, short term weather patterns in specific markets, and the availability of funding to support sales growth.

Growth Plans and Implementation

Our Photochemical Fertilizer Division created the GOLD'n GRO line of liquid fertilizers. The pioneering development work is complete, field trials have been completed on the first products and other field trials are under way.

The Mining Technical Services Division, originally provided typical consulting services which required high level technical personnel, including our President, devoted to each project. To reduce our dependence on our President to generate new consulting contracts, while better utilizing our core professional staff, the division is being reconfigured to focus most of its efforts on a global Internet Information Portal - "insidemetals.com". The information portal operates 24 hours per day 7 days per week anywhere in the world where computers and the Internet are available. Anyone with access to the Internet anywhere in the world can subscribe to the service at any time using their credit card to pay the subscription fee.

With the successful completion of the initial pioneering development work by the Photochemical Fertilizer Division, and with the launch of the information portal by the Mining Technical Services Division, we are implementing growth plans for both divisions that are expected to drive expansion well into the future. The status of these plans and their implementation is described for each division.

Photochemical Fertilizer Division (Itronics Metallurgical, Inc.)

Our manufacturing plant is presently configured to produce 1.2 million gallons (on a single shift basis) of GOLD'n GRO fertilizer annually (about 5,700 tons) and can be expanded to produce 7.2 million gallons of GOLD'n GRO per year, or about 36,000 tons. GOLD'n GRO fertilizer production in 2004 utilized about 5 percent of planned capacity. Planned expansions to achieve the 36,000 ton volume include increasing both dry raw material and liquid storage, increasing tank truck loading capacity, and automation of certain manufacturing functions. Expansion can be achieved incrementally as fertilizer sales continue to grow.

We have developed the following eight-part approach to growth:

1. Increase sales in the established market segments.
2. Develop GOLD'n GRO fertilizer applications for more crops.
3. Expand sales to new territories.
4. Expand the GOLD'n GRO specialty fertilizer product line.
5. Complete development of and commercialize the new glass/tile products.
6. Develop and commercialize environmentally friendly metal leaching reagents for recovery of silver, gold, and other metals.
7. Continue facilities expansion and technology development.
8. Acquire established companies and/or their technologies.

Plans and status of implementing each of the growth categories is explained in more detail in the following sections.

1. Increase sales in established market segments.

We are selling into or developing applications for the three major segments. These are:

- a. Specialty Agriculture which includes Avocados, Citrus, Grapes, Fruit and Nut Trees, and Vegetables.
- b. Bulk Field Crops which include alfalfa, cereal grains, corn, cotton, and soybeans.
- c. The Urban Market, which includes Home Lawn and Garden, Landscape Construction and Maintenance, and Nursery and Greenhouse markets, and Golf Courses.

Our primary focus is to increase bulk GOLD'n GRO liquid fertilizer sales as rapidly as possible. This is being achieved by expanding sales in the Specialty Agriculture segment and in the Bulk Field Crops segment. There are on-going small package sales in the Urban Market, but these are small relative to the other two segments.

2. Develop GOLD'n GRO fertilizer applications for more crops.

Based on our experience to date, it takes approximately two to five years to develop each fertilizer product, which includes regulatory approval. It typically takes another two to four years to achieve market acceptance of successful products, which includes field trials to demonstrate product effectiveness

New product applications are being developed for the dairy cow feed market including young oats, alfalfa, hay, and silage corn. Trials were conducted in 2004. The nutrient content of the alfalfa was improved, in some cases to the highest quality ratings. This benefits the dairy because less nutrient supplements are required for feeding the cows, thus reducing dairy operating expenses. The amount of hay produced per acre increased up to 25 percent. Results of the corn crops are still being evaluated. The dairy cow feed market is large with more than 23 million acres of alfalfa hay being grown in the United States. We anticipate it will take another one to three years to complete development and launch these product applications.

In 2004, we began field trials in Idaho, Oregon, and Washington for applications on onions, potatoes, and winter wheat. In the second quarter of 2005, we began field trials in Rhode Island for lawn and landscape application. Also in the second quarter, we started several new trials in California for silage corn applications.

A new GOLD'n GRO base liquid nutrition program is now being marketed. The program is called the "Gallon and a Quart" or "4 to 1" program. It calls for one gallon of GOLD'n GRO base liquid for each quart of GOLD'n GRO chelated micro-nutrient used in soil applications. Field demonstrations have shown improved nutrition uptake and crop output under this cost effective program. Marketing of this program over the next two to three years is expected to produce a very substantial increase in the tonnage of GOLD'n GRO fertilizers sales.

3. Expand sales to new territories.

The GOLD'n GRO products are being sold in Arizona, California, Colorado, Idaho, Nevada, Oregon, Rhode Island, and Washington, with the majority of our sales in central California. We completed registration of select GOLD'n GRO fertilizers in Idaho, Oregon and Washington during the first quarter of 2005; sales development is now underway. Two GOLD'n GRO products are registered in seven northeastern states and all of the products are registered in New York and in New Jersey with a distributor agreement signed for New Jersey. Based on our experience, commercial sales can be generated approximately one year after introductory sales activities are initiated. We are in the process of identifying distributors for New York and the other seven northeastern states. Each new geographic area developed will require the same procedural approach.

Our plan to expand sales in Urban Markets requires the consumer to utilize fertilizer injection equipment. This equipment provides economical, easy use of liquid fertilizers for consumer lawns and gardens. We recently added two types of fertilizer injectors to our "e" store, which is the first step into this market. Additionally, other fertilizer injectors are already available to consumers through irrigation supply stores.

4. Expand the GOLD'n GRO specialty fertilizer product line.

We are developing two new specialty product lines, calcium plus magnesium fertilizer and a high magnesium content fertilizer, both targeting foliar and soil application. We expect to launch sales of the calcium plus magnesium product in the second half of 2005 and the magnesium in 2006 or 2007.

We are developing a new category of repellent fertilizers that are expected to be sold at higher profit margins than our other products. The GOLD'n GRO Guardian animal repellent fertilizer is an example of this type of specialty fertilizer. The U.S. market for animal repellents is believed to exceed \$50 million in annual sales. Products currently in the market have limited effectiveness so there is a real opportunity for a line of systemic products that are effective for several weeks after each application. GOLD'n GRO Guardian small plot tests have shown effectiveness for 8 to 12 weeks as well as excellent wintertime effectiveness.

In the second quarter of 2005 we acquired ownership interest in the GOLD'n GRO Guardian trademark, product rights, and the repelling product. We now own 100% of all rights related to GOLD'n GRO Guardian. Results of the research of the GOLD'n GRO Guardian animal repellent fertilizer has provided a basis for a bird (goose) repellent fertilizer that will be perfected for small plot field trials and registration after the registration of GOLD'n GRO Guardian is underway. Currently, this product line is strictly for non-food plant applications.

We believe the users of the GOLD'n GRO animal repellent/fertilizer will be upscale homeowners, commercial landscapers, and municipal facilities, and wholesale and retail nurseries. The initial sales center will be in Rhode Island.

5. Complete development of and commercialize glass/tile products.

In 2003, we developed and produced glass /tile products proving that the product concept is technically viable. When the development of the glass/ceramic tile product is completed, we will achieve the ability to recycle 100 percent of the photoliquid materials received from customers, including waste that is generated internally during fertilizer production. We have completed preliminary market research for the tile markets, but expect to do much more work to develop a plan to enter this market.

6. Develop and commercialize metal leaching reagents for recovery of silver, gold, and other metals.

In 2002 and 2003, we initiated efforts to apply our technology to extract silver from photoliquids to the mining sector. This work will be further expanded and a small pilot circuit will be established to chemically process certain categories of silver-bearing solid wastes. The gold mining sector currently uses cyanide and other toxic chemicals in their leaching process. We believe it may be possible to create and adapt new non-toxic leaching reagents and leaching procedures for processing other secondary materials and certain types of mine generated products. The specific markets for leaching reagents in gold and silver mining is large and world wide, but has not yet been studied in detail for market development. Our Technical Services Division maintains an extensive library and database of mines and mining activities worldwide, which provides us ready access to market information as we need it. Much pilot plant work, including one or more field pilot operations, must be completed before this can be done.

7. Continue facilities expansion and technology development.

As fertilizer sales volume increases, we will need to increase tank truck loading capacity. With the introduction of additional bulk products and increased demand for our products, load out capacity for shipment of three more bulk products is needed. We developed a preliminary construction budget and are seeking financing so that construction can be scheduled. While we believe that we can handle expected growth in 2005 with the existing load-out module, we hope to complete construction on the new load out equipment during the first quarter of 2006.

8. Acquire established companies and/or their technologies.

To enhance our operations and market presence, we intend to acquire small established companies or their technologies. In 2005, we completed our acquisition of the GOLD'n GRO Guardian technology. We have decided to delay any further acquisitions until additional financing is obtained.

Mining Technical Services Division (Whitney & Whitney, Inc.)

Historically, this division provided consulting services to the mining industry. In August 2005, we launched an Information Portal in the Internet. This division has a two-part approach to growth:

1. Continue to provide consulting services.
2. "e-commerce" Internet Information Portal-"insidemetals.com".

Plans and status of implementing each of the growth categories is explained in more detail in the following sections.

1. Continue to provide consulting services

During the third quarter of 2004, sales of the Mining Technical Services (Whitney & Whitney, Inc.) division declined due to winding down of on-going projects and delays related to client financing for new projects. Some of the issues related to new client project start up were resolved by the clients during the third quarter of 2004 and the remaining work was completed in early 2005. The technical services satellite consulting office was closed in early May, but certain key staff members have been retained. We intend to continue a low level effort to solicit and perform technical services for mining companies and other businesses or government agencies that have mineral interests or minerals related responsibilities

2. "e-commerce" Internet Information Portal-"insidemetals.com".

In August 2005, we launched the website "insidemetals.com," an Information Portal targeting the companies and individuals interested in the mining and precious metals industry. The website will generate revenue by charging a subscription fee for monthly access to the site. Currently, the site contains an array of information about gold and companies in the gold industry. We intend to add information on other mineral sectors gradually over time.

We anticipate that mining company professionals, all government agencies with minerals related responsibilities, financial industry investment professionals, and individual investors who have an interest in investing in mining companies but who have limited mineral industry knowledge will benefit from this Information Portal. The market scope for this service is global and is accessible with a "click of a mouse" in all countries of the world through the Internet. Whitney & Whitney, Inc. has contacts throughout the world and expects that the good will generated over a period of more than 25 years will provide market support for this service.

BUSINESS

INTRODUCTION

We are the inventor and developer of the "Beneficial Use Photochemical, Silver, and Water Recycling" technology that produces environmentally beneficial GOLD'n GRO fertilizers and silver bullion.

We are an environmental process technology company that has developed what we believe is a unique technology for photochemical recycling. We, through our subsidiary, Itronics Metallurgical, Inc., extract more than 99% of the silver and virtually all of the other toxic heavy metals from used photoliquids and use this "Beneficial Use Photochemical, Silver and Water Recycling" technology to produce environmentally beneficial chelated liquid fertilizer sold under the trademark GOLD'n GRO, animal repellent/fertilizer to be sold under the trademark GOLD'n GRO Guardian, and silver bullion. We also provide process planning and technical services to the mining industry.

OUR PRODUCTS AND SERVICES

We currently operate the following two business segments under separate wholly owned subsidiaries:

Photochemical Fertilizer: This segment, known as Itronics Metallurgical, Inc., operates a fertilizer manufacturing, photochemical recycling, and silver refining facility. Revenues are generated by photochemical management services, sales of photochemical concentrators, sale of silver, and sale of GOLD'n GRO liquid fertilizer products.

Mining Technical Services: 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 25 years. It employs technical specialists with expertise in the 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. WWI was under contract with the Country of Bolivia from 1986 through early 1992 to assist it in developing its mining industry. In 2005 WWI launched an internet website to provide gold mining company profiles to the interested public.

We have 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:

Itronics Metallurgical, Inc.:

IMI is our wholly owned subsidiary. 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.

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. We own 92.5% of NHP.

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%. We own a 37% limited partnership interest in AG&S. In total, we own approximately 83% of American Hydromet.

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 has no business operations 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.

Whitney & Whitney, Inc.:

WWI was incorporated in 1977 and is our wholly owned subsidiary. WWI was primarily a mineral consulting firm that provides planning and technical services to the mining industry. WWI is now developing an internet website to provide gold mining industry data to the investing public, while maintaining a presence in the technical consulting field.

SUMMARY HISTORY OF OPERATIONS

Whitney & Whitney, Inc. was established 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.

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 our 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. It took until 1997 to develop and demonstrate a satisfactory fertilizer and to complete university testing to demonstrate its agronomic viability.

In March 1998 IMI signed a five year definitive licensing, manufacturing, and distribution agreement with Western Farm Service, Inc. (WFS), one of the largest liquid fertilizer bulk retailers in the western United States. The agreement was renewed in March 2003 for another five years, subject to annual cancellation provisions. The agreement 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. WFS has approximately 90 agricultural retail outlets in these states. In the discussion below, and elsewhere in this report, we refer to this group of retail outlets as our licensed distributor network.

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 was completed 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. By the first quarter of 2001 we were positioned to develop sales for more than a dozen liquid fertilizer products.

In 2001, at the request of our licensed distributor, we developed a chelated liquid micronutrient zinc fertilizer with the objective of selling the product in truckload quantities. This fertilizer 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 liquid fertilizer was successfully introduced into the distributor network. During 2002 work on a bulk liquid GOLD'n GRO fertilizer 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 liquid micronutrient zinc product for bulk sale was initiated. Field testing of both new bulk liquid fertilizers 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 liquid fertilizer formulations were evaluated for suitability and market potential. By the end of 2003, product line development had been completed, and 13 fertilizers covering two categories have been established: chelated liquid multinutrient fertilizers and chelated liquid micronutrient fertilizers. The fertilizers are sold both to the general public and through licensed and non-licensed distributors. Product improvement and new product development will continue, but our 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.

In 2003 we participated in the development of an animal repellent/fertilizer that will be sold under the trademark 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 a biopesticide. Introduction of this product for commercial sales will be delayed until the registrations are completed. Subsequent to December 31, 2004, we acquired the interest in the GOLD'n GRO Guardian trademark, product rights, and the repelling product formula owned by Mr. Howland Green. We now own 100% of all rights related to GOLD'n GRO Guardian. Mr. Green has become one of our directors 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 and California registration process.

During the period 1999 through 2003 we developed a "low temperature vacuum distillation" machine that operates at room temperature and is able to remove up to 80% of the water from photochemical 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".

In 2002 we delivered five of these Photochemical Silver Concentrators to the Department of Defense. 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.

After we began producing fertilizer, we noted that the by products of the process were the main materials needed to manufacture glass and ceramic. Therefore, in early 2003, we began research and development of glass and tile formulations. During 2003, the first pieces of glass/ceramic tile were produced. With the successful development of a glass/ceramic tile product, we achieve the ability to recycle 100 percent of the materials received from customers, including waste that is generated internally during processing. 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.

A more detailed discussion of our business, based on our two business segments described above, follows.

PHOTOCHEMICAL FERTILIZER

Operations

We operate 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. 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.

Photochemical services operates as a regional business in northern Nevada, serving more than 200 customers in the northern Nevada 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. We are able to compete effectively based upon pricing and service quality.

Growth of silver bullion 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 our proprietary technology can be used and that offer better profit margins than conventional precious metal refining. We will be actively looking at opportunities to expand this segment in future years.

In early 2003 we 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 us to expand our photochemical supply for use in GOLD'n GRO fertilizer manufacturing. Photochemical silver concentrators are expected to be a source of revenue growth in future years as we continue to expand nationally. Our photochemical blending technology is designed to utilize the concentrate in fertilizer, after it is demetallized.

Spent photochemical liquids received from customers are logged and recorded, then tested for silver content and contaminants. We achieve high contaminant control standards by working proactively with our regular customers. Once testing is completed, the photographic solutions are available for processing.

Growth Plans and Implementation

Implementation of our "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. Our licensed

distributor is integrating our GOLD'n GRO fertilizer products into its proprietary field programs in a way that makes them essential components. Once our products are in, substitution back to prior programs becomes difficult. Because of this, we believe sales growth is solid and is integrated to enhance the likelihood of repeat sales as we move into the future.

We have been working with our 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 fertilizers, which are (1) replace existing fertilizers that do not fully satisfy existing needs, (2) develop new fertilizers which will satisfy presently unfulfilled needs, and (3) develop fertilizers that can be blended into existing proprietary field blends to improve their effectiveness. Replacement fertilizers are expected to have higher sales growth rates than fertilizers developed to fulfill the other two functions, defined as development products. The GOLD'n GRO Guardian fertilizer being developed as an animal repellent/fertilizer fits into the second category, and the GOLD'n GRO Base Liquid fits into the third category.

The GOLD'n GRO fertilizer line provides several fertilizers for the turf and ornamental markets, 3 fertilizers for the nursery and specialty agriculture markets, and 5 high quality chelated micronutrient fertilizers which can be used in all of the markets. The GOLD'n GRO chelated liquid micronutrient and chelated liquid multinutrient fertilizers 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. We presently sell our commercial GOLD'n GRO fertilizers in 2.5 gallon, 55 gallon, and 250 gallon containers and partial or full truck load quantities of up to 4,800 gallons.

We have become an important supplier of chelated micronutrient and chelated multinutrient specialty fertilizers to our licensed distributor for several reasons, one of which is that improved nutrient uptake is being demonstrated in large scale field applications of the GOLD'n GRO fertilizers when compared to applications that use established chelated micronutrient fertilizers. 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 fertilizers are specifically designed for fertigation application in micro-sprinkler and drip irrigation, which is a growing application method and requires liquid fertilizers with superior stability in irrigation water under widely varying conditions.

Most of the GOLD'n GRO fertilizers 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 registered in Rhode Island, Massachusetts, Connecticut, Delaware, New Jersey, Pennsylvania, and New York. GOLD'n GRO bulk product sales are established in Arizona and California, with the majority of the sales being made in California. 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. We are developing bulk customers in northern Nevada and have started discussions with potential distributors in selected states not covered by our licensed distributor network, including the northeastern states, Florida, and Texas.

We have expanded the number of GOLD'n GRO liquid fertilizers being offered through our "e-store" catalog. This expanded offering makes GOLD'n GRO available to two important Professional Market segments: the Landscape Maintenance Market and the Nursery and Greenhouse Market. Internet sales are still relatively small as a percentage of total sales, but have grown in each of the past two years.

The project to develop and sell a line of animal repellent/fertilizers under the trademark GOLD'n GRO Guardian provides direct GOLD'n GRO 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 animal repellent/fertilizer line presents the opportunity to develop products for the animal repellent 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.

We are continuing to develop new sources of used photochemical liquids, although we presently have more than adequate volume of in-coming photoliquids to support current and near term GOLD'n GRO fertilizer sales growth. We have been developing Itronics Metallurgical Photochemical Silver Concentrator technology to reduce the cost of transporting the used photochemical liquids to the Reno manufacturing plant. We have also been identifying and qualifying both non-photochemical sources of used chelates and non-photochemical waste streams that might be useable as substitute materials for virgin additive raw materials that we presently purchase.

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 we can begin to use "non-photo" chelates. Replacing virgin additive materials with materials from secondary sources provides us 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.

Sales of 5 ounce "Silver Nevada Miner" bars through our "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.

Our 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 we continue to identify and develop our GOLD'n GRO liquid fertilizer product markets, additional unforeseen changes could require additional plan modifications. 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, we 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.

Competition

Our GOLD'n GRO fertilizer products compete with well established fertilizer companies that have significantly more capital with which to market their products. Our competitors include large companies such as Scotts Miracle-GRO, Dow AgroSciences Company, Uniroyal Chemical Corporation, and smaller companies such as Pursell Technologies, Inc. We believe that our fertilizers compete primarily on the basis of product quality and performance.

Our photochemical recycling fees are generated primarily from removing used photochemicals from our customer's sites. We compete for these customers with large national firms like Safety Kleen and Philips Environmental but our primary competitors are smaller regional firms like ECS Refining in Northern California.

We sell our silver bullion to a commercial refinery under standard industry terms. We are a very small producer of silver; consequently the refiner will purchase all the silver we can presently produce. For several years, there has been a global shortage in the supply side of the silver market. Our ability to sell our silver bullion could only be impacted if there were a dramatic negative change in the silver market, and only then if we grow to be a much larger silver producer than we are now.

Markets

Fertilizer

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 \$5 billion segment making the total a \$14 billion market. Substantially all of our present GOLD'n GRO fertilizer sales are in the "Specialty Ag" segment.

More than 50 million tons of fertilizer products are sold annually in the United States. This includes almost 20 million tons of multi-nutrient fertilizers and almost 3.5 million tons of secondary nutrient and micro-nutrient products. About 38 percent of the total usage is as fluid fertilizers. Our 2004 sales represent less than 0.0005 percent of the 2004 multi- and micro-nutrient market.

Our GOLD'n GRO fertilizers are all liquid. There are major differences in manufacturing, distribution, and sale of liquid fertilizers as compared to dry fertilizers. Basic differences are described here so that the investor can better understand the technology, logistics, and application of liquid fertilizers and thereby gain a better understanding for the market niche that we are entering.

Liquid fertilizer technology is more complex than dry technology. Typically dry solids can be readily blended into dry mixtures that can then be bagged, or transported as dry bulk powders. In contrast, liquid fertilizers are reacted products and must be manufactured using precise recipes so that the final product will remain stable. Dry products can be stored for years without degradation, whereas liquid products typically have a limited storage life ranging from a few days for proprietary field blends, up to 4 years or longer for certain types. Liquid fertilizers can also freeze over a rather wide range of temperatures, a problem not encountered with dry fertilizers. Because of these technical factors, bringing a line of liquid fertilizers to market is much more complex than bringing a line of dry products to market.

Dry fertilizers are typically applied with dry spreaders. Liquids are sprayed on with tank sprayers or aircraft, injected into the soil using special applicators, or applied through irrigation systems using sprinklers, micro-sprinklers, or drip irrigation. Liquid fertilizers can also be applied with ditch irrigation by running the fertilizer into the water at controlled rates. The use of irrigation water to apply the liquid fertilizers is called fertigation.

Dry fertilizer packaging and transport is typically simpler and less costly than liquid fertilizer packaging and transport. Bulk liquids must be moved in tank trucks or tank rail cars and stored in large bulk tanks at distribution points. The distributors who sell the liquids to farmers must install and operate tank farms and maintain a fleet of specialized applicators. Distribution and application of liquid fertilizers typically requires specialized technical knowledge related to mixing and handling as compared to the use of dry fertilizers. Liquid fertilizers are typically easier and less costly to apply when irrigation is available, and availability of the fertilizer nutrients in the soil for uptake by crops is greater when liquid fertilizers are used. Use of fertigation to apply liquid fertilizers can reduce tractor trips through the fields, reducing cost and also reducing soil compaction. Because of less cost for application and improved availability of the liquid nutrients to the plants, liquid fertilizers in the United States are continuing to gain market share. Use of liquid

starter mixes for dry land crops is also expanding, especially for planting field crops such as cotton, corn, soybeans, and wheat.

Only certain fertilizer distribution companies have specialized in marketing liquid fertilizers and have the facilities and equipment required to sell, deliver, and apply the liquid fertilizers. Our licensed distributor is such a company.

The GOLD'n GRO fertilizers are complex and represent a new category of liquid nutrition technology. The GOLD'n GRO fertilizers contain bulk chelating agents that conventional liquid fertilizers do not contain. The chelating agents, which are normally quite costly, are supplied as components of the starting photographic liquids. The chelating agents improve the availability of micronutrient metals such as zinc, iron, manganese, and the secondary nutrients calcium, and magnesium. The photoliquids also have a natural content of sulfur, the other important secondary nutrient. These chelate enriched multinutrient characteristics distinguish the GOLD'n GRO liquids from other liquid fertilizers and are the main reason why the GOLD'n GRO liquid fertilizers represent a new type of nutrient technology.

The animal repellent/fertilizer market is a new market for us. 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.

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 an 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. We plan to pursue development of this line of products as rapidly as possible.

Photochemical Recycling

We estimate 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). We estimate the total annual market for recycling this category of waste to be in the range of \$400 to \$500 million.

We are 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. Over the last several years, it became clear to us 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. Digital methods are being adopted in the medical industry, and although the medical sector is relatively high growth with the aging U.S. population, digital 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.

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

Silver

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.

Seasonality and Working Capital

In analyzing the market and industry competitors, it is apparent that two factors significantly impact our ability to penetrate these markets in a meaningful way. First, the seasonal aspect of 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, we expect 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 growing cycle of various crops for which our fertilizer products are utilized. To overcome weather related effects on fertilizer sales, we are 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 GOLD'n GRO fertilizer sales, we must increase our net working capital to a level higher than that of non-seasonal industries. For example, some of our competitors have working capital equal to their annual

sales. Consequently, ongoing debt and equity funding will be required for us to grow, even after a profitable level of operations is achieved.

Research, Development, and Technology

The majority of our research and technology is proprietary, which means it has not been patented, but is protected with strict confidentiality agreements and limited access to our research and production facilities. A U.S. patent on the silver separation process was issued in 1987 and is now expired. We made a corporate decision to not patent our research results as the cost of obtaining and defending patents is prohibitive.

We conduct 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.

A 3 year field trial on Valencia orange trees being carried out with oversight from a major university in southern California was completed in 2004. Two year cumulative results have been analyzed and significant positive results were obtained. Fruit output per tree and fruit quality were both increased.

During 2003, we completed a key phase of the research project to produce formulated glass products. 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 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.

During 2003 and 2004 we continued to be offered the opportunity to explore the feasibility of recycling other non-photographic materials into fertilizer. We have 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.

Environment and Regulation

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 our facility and has been processed, the generator's hazardous waste liability has been removed. Using our process, virtually all metals, including most of the iron, are removed. The end result leaves us with a non-hazardous "toxic-metal-free" liquid which is legal for use in high quality GOLD'n GRO liquid fertilizers.

While in general our 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. We make a continuing effort to anticipate regulatory, political and legal developments that might affect our operations, but may not always be able to do so. We cannot predict the extent to which any legislation or regulation may affect future operations.

In particular, the regulatory process requires firms in our 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. We are 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.

For several years we have been studying the various regulatory requirements under RCRA and have been working with state and local environmental officials regarding the extent to which hazardous waste regulations apply to our operations. Through this process, we reached the conclusion that due to use of photochemicals as a beneficial ingredient in our 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 we received concurrence from State of Nevada environmental officials that our 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 our 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 our Nevada customers will be exempt from the regulations, including hazardous material transport/manifest rules. We believe that this exemption applies nationwide. Therefore, we intend to pursue similar concurrence from environmental officials in all applicable states, so that all our 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. We believe that the GOLD'n GRO line of fertilizer products is uniquely suited to alleviating this environmental concern and that we are well positioned to meet future environmental needs.

Permits and Inspections

To the best of our knowledge, we have obtained permits from all governmental agencies having jurisdiction, such as the EPA, Nevada Department of Environmental Protection, Washoe County Health Department and the City of Reno, Nevada. We are not required to obtain federal permits, but are required to have, and have obtained, local permits for our photochemical recycling facility under the provisions of the Federal EPA. Similar permits will be required of all facilities that we may construct. Our 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, our operations are subject to the Safe Drinking Water Act, TSCA (Toxic Substances Control Act-pursuant to which the EPA has promulgated 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 our employees.

MINING TECHNICAL SERVICES

Services offered

Our Mining Technical Services segment offers a wide range of technical services to the mining industry, including management support, mineral project development, ore reserve and material balance reviews, expert assistance in contract dispute or litigation, and mineral economics and cost studies

Operations

Our Mining Technical Services segment accounted for 17% 2004 consolidated revenue. Golden Phoenix Minerals, Inc. 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.

Expansion Plans

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 our 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", provides 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 was launched in August 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 our 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.

Competition

Our consulting services are generally in the area of management support and mineral economics. Management support projects include advice on mineral development strategies, audits of ore reserves and appraisals on mineral properties primarily to mining companies. Our projects tend to be short term, generally less than one year, and are typically sole sourced to us based on the reputation of our president. Other companies that provide similar services include local and regional mineral consulting firms.

Our competition for the Internet Information Portal is other websites that provide gold and other precious metal information to the interested public.

DESCRIPTION OF PROPERTIES

FACILITIES.

We lease 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.

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.

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.

LEGAL PROCEEDINGS

We may become involved in a lawsuit or legal proceeding at any time in the ordinary course of business. Litigation is subject to inherent uncertainties, and an unexpected adverse result may arise that may adversely affect our business. Certain lawsuits have been filed against us for collection of funds due that are delinquent, as described below. We are currently not aware of any litigation pending or threatened for any reason other than collection of funds due and already recorded. We are not aware of any additional legal proceeding or claims that we believe will have, individually or in the aggregate, a material adverse affect on our business, financial condition or operating results.

As of June 30, 2005 total recorded liabilities of \$802,166 including accrued interest to June 30, 2005, were subject to a total of 15 separate lawsuits for the collection of the funds due. These include 12 leases totaling \$604,896 (reflected in Current Maturities of Capital Lease Obligations) plus \$56,960 in additional interest (reflected in Accrued Interest) and three trade payables totaling \$129,191 (reflected in Accounts Payable) plus \$11,119 in additional interest (reflected in Accrued Interest). The leases are individually secured by specified equipment. One case discussed below, seeking \$35,210, was filed in Lake County, Illinois. The remaining unsettled cases discussed below were filed in Washoe County, Nevada between February 2003 and May 2004.

The accrued interest noted above was recorded based on our assessment of additional amounts we believe is probable and is related to four cases originally seeking \$423,375; the creditors have received judgments in three of these cases and the fourth is in litigation. We will continue to accrue interest until these cases are settled or paid in full.

We estimate an additional \$9,400 interest may be possible on one other case; however, we have not accrued this amount because we do not believe it is likely to be incurred. This estimate is related to one case, seeking \$35,210, which was filed in March 2003 with no further contact since then. During the third quarter of 2005, we paid off one suit totaling \$36,626 including interest and costs of \$17,200 that had not been accrued; this loss will be recorded in the third quarter.

We have a total of nine cases, which originally sought \$507,017, which we deem to have a remote possibility of incurring additional costs. As of June 30, 2005, we had paid down the amounts due under these claims to \$268,096. Subsequent to June 30, 2005 three of the claims were paid off and in October 2005 we settled three additional claims. These three claims, originally seeking \$181,672, will be paid under a payment plan over the next twelve months. The other three claims are current under previously negotiated payment agreements.

Successful settlement of the above claims is dependent on future financing.

MANAGEMENT

DIRECTORS AND EXECUTIVE OFFICERS

The following are our directors and executive officers:

<u>Name</u>	<u>Age</u>	<u>Position</u>	<u>Position Held Since</u>
Dr. John W. Whitney	58	President/Treasurer Director	May 1988
Paul H. Durckel	87	Director	September 1995
Howland S. Green	51	Northeast Manager of GOLD'n GRO sales Director	April 2005
Gregory S. Skinner	50	Secretary	December 1990
Duane H. Rasmussen	74	Vice President; Vice President and General Manager-IMI	November 1997 May 1994

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. _

John W. Whitney:

In addition to being our President and a Director from 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.

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 our 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 our director 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 founded the Holly Ridge Nursery in Kingston, Rhode Island in 1989 and was its owner and President until the business was sold in September 2005. He is the concept creator and a founder of the North American Deer Management Network. Mr. Green researched and developed the Mirrepel and subsequently co-developed the GOLD'n GRO Guardian systemic deer and rabbit repellents. Through his ownership of the Holly Ridge Nursery he has gained extensive knowledge of the landscape construction and maintenance and wholesale and retail nursery markets. He has also served as consultant to "Ask This Old House".

Gregory S. Skinner, Esq.

Mr. Skinner has served as our secretary and general counsel since December 1990. He obtained his B.A. degree in Economics from the University of California 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 Ironics 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 our Vice President in November 1997. He initially joined us 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.

AUDIT COMMITTEE

At present we do 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. We have 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.

CODE OF ETHICS

The Board of Directors has adopted a Code of Business Conduct and Ethics (Code) that is applicable to our 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 us at www.itronics.com. If requesting by e-mail, please indicate a preference of a reply by e-mail or by physical mail.

EXECUTIVE COMPENSATION

The following tables set forth certain information regarding our President and each of our most highly-compensated executive officers whose total annual salary and bonus for the fiscal year ending December 31, 2004, 2003 and 2002 exceeded \$100,000:

Name and Principal	Calendar Year	Annual Compensation		Long Term Compensation Securities Underlying
		Salary	Bonus	Options (#)
Dr. John W. Whitney: President, Treasurer and Director (1) (2)	2004	\$126,150	\$-0-	550,000
	2003	\$126,375	\$-0-	-0-
	2002	\$127,350	\$-0-	3,250,000
Duane H. Rasmussen Vice President, VP and General Manager	2004	\$132,000	\$-0-	425,000
	2003	\$132,000	\$-0-	-0-
	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 shares of our common stock at \$0.25 per share, effective July 1, 2002 he was granted an option for 3,000,000 shares of our common stock at \$0.30 per share, and effective May 7, 2004 he was granted an option for 550,000 shares of our common stock at \$0.15 per share. These options are exercisable at any time until one year after Dr. Whitney leaves our employment. Effective October 2, 2002 Dr. Whitney was granted a five year option for 250,000 shares of our common stock 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 our 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 shares of our common stock at \$0.15 per share. This option is exercisable at any time until one year after Mr. Rasmussen leaves our employment.

Option/SAR Grants in Last Fiscal Year

Number of	% of Total
Securities	Options to

Edgar Filing: ITRONICS INC - Form SB-2/A

<u>Name</u>	<u>Underlying Options Granted (1)</u>	<u>Employees in Fiscal Year</u>	<u>Exercise or Base Price</u>	<u>Expiration 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 placemen