

INTERNATIONAL ISOTOPES INC  
Form 10-K  
March 31, 2015

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**FORM 10-K**

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF  
1934

For the fiscal year ended December 31, 2014

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF  
1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number: 000-22923

**INTERNATIONAL ISOTOPES INC.**

(Exact name of registrant as specified in its charter)

**Texas**  
(State or other jurisdiction of incorporation  
or origination)

**74-2763837**  
(IRS Employer Identification Number)

**4137 Commerce Circle**

**Idaho Falls, Idaho**

(Address of principal executive offices)

**83401**

(Zip code)

**(208) 524-5300**

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: None.

Securities registered pursuant to Section 12(g) of the Act:

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COMMON STOCK, \$.01 PAR VALUE

(Title of Class)

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.  
YES  NO

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. YES  NO

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. YES  NO

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). YES  NO

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Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o

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Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer, and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer   
Non-accelerated filer  Smaller reporting company   
(Do not check if a smaller reporting company)

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). YES  NO

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the average bid and asked price of such common equity at June 30, 2014, the last business day of our second fiscal quarter, was approximately \$9.5 million. For purposes of this calculation, all directors and executive officers of the registrant and holders of 5% or more of the registrant's common stock are assumed to be affiliates. This determination of affiliate status is not necessarily conclusive for any other purpose.

As of March 4, 2015, the number of shares outstanding of the registrant's common stock, \$.01 par value, was 402,020,747 shares.

Documents Incorporated by Reference

Certain information called for in Part III of this Annual Report on Form 10-K is incorporated by reference to the registrant's definitive proxy statement for the 2015 annual meeting of shareholders, which will be filed with the Securities and Exchange Commission not later than 120 days after the registrant's fiscal year ended December 31, 2014.



**INTERNATIONAL ISOTOPES INC.**

**FORM 10-K**

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## Cautionary Note Regarding Forward-Looking Statements

*This Annual Report on Form 10-K (the "Annual Report") contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical fact, including statements regarding industry prospects and future results of operations or financial position, made in this Annual Report are forward-looking. Words such as "anticipates," "believes," "should," "expects," "future" and "intends" and similar expressions identify forward-looking statements. In particular, statements regarding: the commercial opportunity of the depleted uranium and fluorine extraction processing facility, the expected growth in various business segment revenues, our expansion into new markets, the ability of our products to compete with several larger companies and products, the results of market studies used to support our business model, our anticipated improvement in economic conditions, our ability continue cobalt-60 production and manage costs, and the sufficiency of our available cash and revenues from operations to meet our operating needs; are forward-looking. Forward-looking statements reflect management's current expectations, plans or projections and are inherently uncertain. Actual results could differ materially from management's expectations, plans or projections. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date of this Annual Report. Certain risks and uncertainties that could cause actual results to differ significantly from management's expectations are described in the section entitled "Risk Factors" in this Annual Report. That section, along with other sections of this Annual Report, describes some, but not all, of the factors that could cause actual results to differ significantly from management's expectations. We do not intend to publicly release any revisions to these forward-looking statements that may be made to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events. Readers are urged, however, to review the risks and other factors set forth in the other reports that we file from time to time with the Securities and Exchange Commission (the "SEC").*

## PART I

### Item 1. BUSINESS

#### General Business and Products Description

International Isotopes Inc. (the "Company," "we," "us" and "our") was formed as a Texas corporation in 1995. Our wholly-owned subsidiaries are International Isotopes Idaho Inc., a Texas corporation; International Isotopes Fluorine Products, Inc. an Idaho corporation; and International Isotopes Transportation Services, Inc., an Idaho corporation.

Our core business consists of six reportable segments which include: Nuclear Medicine Standards, Cobalt Products, Radiochemical Products, Fluorine Products, Radiological Services, and Transportation.



During 2014 we focused our efforts on achieving profitability in each of our core business segments and during the year reached several significant goals. During 2014 we:

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Began sales of a new lightweight flood source in April 2014, that we developed in collaboration with RadQual, LLC ( RadQual );

.

Participated in the redesign of a new cobalt production target and completed successful contract negotiations with the DOE allowing us to enter into a ten year agreement for cobalt production in the Advanced Test Reactor located in Idaho;

.

Expanded our customer base for radiochemical products including the addition of a new exclusive supply agreement with a customer that should begin to take effect in 2015;

.

Commissioned our new mobile hot cell and were awarded several radiological services jobs through the DOE s Orphan Source Recovery Program ( OSRP );

Increased sales revenue in three of our business segments resulting in an overall 10% improvement in revenue compared to the prior year; and

Continued to reduce our overall operational expenses in comparison to the prior year.

In 2015, we plan to continue efforts to further expand and improve upon our operations in our core business segments. We intend to continue to invest in these segments and work to reduce production costs and expand sales in each of them. The following paragraphs provide a brief description of each of our business segments. Certain financial information with respect to each of our business segments, including revenues from external customers, a measure of profit or loss, and total assets, is set forth in Note 14 in the Notes to our Consolidated Financial Statements which begin on page F-6.

#### Nuclear Medicine Standards

This segment consists of the manufacture of sources and standards associated with SPECT (Single Photon Emission Computed Tomography) imaging, patient positioning, and calibration or operational testing of dose measuring equipment for the nuclear pharmacy industry. These items include flood sources, dose calibrators, rod sources, flexible and rigid rulers, spot markers, pen point markers, and a host of specialty design items. We manufacture these products for RadQual, of which we own a 24.5% interest, through an exclusive manufacturing agreement. The manufacturing agreement provides that we will manufacture sources exclusively for RadQual and will not manufacture products that would directly compete with RadQual sources. The agreement also states that RadQual will only procure sources manufactured by us for distribution to RadQual customers. Should this agreement with RadQual terminate, we would be precluded from competing with RadQual in the nuclear medicine market. For this reason, we have worked to expand revenues from other segments to decrease our risk of dependency on one specific customer. The initial term of the agreement with RadQual expired on December 31, 2008, but the agreement automatically renews each January 1<sup>st</sup> thereafter unless otherwise terminated by either party with 60 days written notice.

There are over 5,000 nuclear medicine centers in the U.S. that require nuclear medicine products on a regular repeat basis. We have been manufacturing these products for RadQual since 2001. The majority of nuclear medicine product sales are to U.S. customers; however, in recent years we have seen an increase in foreign sales. All of these products contain radioactive isotopes that decay at a predictable rate. Therefore, customers are required to periodically replace most of these products when they reach the end of their useful lives. The useful life of these products varies depending on the isotope used in manufacture, but in most cases averages 18 months to two years. The isotopes used in manufacturing these nuclear medicine products are available from various sources world-wide. In addition to the

products themselves, we have developed a complete line of specialty packaging for the safe transport and handling of these products.

RadQual has numerous distributors for direct sales of its products. Formerly, the largest distributor was Technology Imaging Services Inc. ( TIS ). In December 2010, we formed a 50/50 joint venture with RadQual to acquire the assets of TIS and to use those assets to create TI Services, LLC ( TI Services ). We believed that this joint venture would provide growth opportunities in existing and future RadQual product lines both domestically and internationally.

Although TI Services experienced net losses in the years 2011 through 2013, in 2014, as a result of our continued efforts to enhance marketing and trim operating costs, TI Services reported a net profit. This success is also due in part to the new lightweight imaging source, Rad-Lite, that we introduced to the market in April 2014, in collaboration with RadQual, which TI Services markets.

### Cobalt Products

This segment includes the fabrication of cobalt capsules for teletherapy or irradiation devices, and recycling of expended cobalt sources. Although historically bulk cobalt sales have accounted for a large percentage of the total revenue from this business segment, as further described below, during the past two years we have not had any bulk sales because of our inability to pull cobalt material from the Advanced Test Reactor ( ATR ) located in Idaho, which is under the direction of the U.S. Department of Energy ( DOE ) and its prime operating contractor which operates the ATR.

The year-over-year demand for cobalt products has continued to remain strong as a result of the introduction of several new types of cobalt therapy units and we have continued to see robust growth in the demand for cobalt manufactured products for those devices. We continue to explore opportunities to further develop cobalt products sales through increased production of finished source products. The production, use, transport, and import/export of these products are all heavily regulated, but we have developed an experienced staff of technicians, drivers, and supervisors to comply with the regulations and support cost effective and timely delivery of these products. One reason we established our Transportation segment was to support the delivery of cobalt products.

Historically, most of our cobalt production has been dependent upon the DOE and its prime operating contractor, which controls the ATR operations and, therefore, controls the continued production of cobalt in the government-funded ATR. In June 2012, a leak of a cobalt target belonging to another commercial business resulted in the curtailment of all further cobalt handling and production activities at the ATR pending completion of several corrective actions. The investigation into the leaking cobalt target identified three areas requiring corrective actions. Those areas were: (1) changes to cobalt target handling controls, (2) concerns with continued irradiation of in-process targets, and (3) enhancing the design of future cobalt targets. During 2013, we worked with the prime operating contractor to resolve these issues, and in October 2013, we were able to resume shipments of some cobalt material to our production facility in Idaho Falls, ID. During 2014, we continued to work with the contractor to complete a new cobalt target design that could be used in the ATR and to negotiate a new cobalt production agreement with the DOE. In October 2014, we were able to complete a ten year agreement for cobalt production with the DOE and in early 2015, the DOE resumed cobalt irradiation in the reactor. Following completion of the agreement with DOE, we began putting commercial sales agreements in place with our customers and in accordance with those agreements in early 2015, we began receiving customer payments on future cobalt shipments from those customers. We expect significant sales of our cobalt-60 material beginning in 2017. For the next two years, however, our access to supplies of high activity material will be limited.

We continue to work with the DOE on the possibility of resuming production or sale of our older style cobalt targets. We are currently in negotiations with the DOE to determine how or if this irradiation will proceed, and hope that irradiation of these older style targets can resume. Because cobalt takes approximately two to three years to produce, these past interruptions in irradiation have created a gap in our ability to manufacture cobalt products. To mitigate the impact of these delays and interruptions to our cobalt production activities we are investigating alternate sources of cobalt supply, evaluating possible sales of lower activity cobalt already in process, and identifying additional reactors for cobalt irradiation.

### Radiochemical Products

This segment includes production and distribution of various isotopically pure radiochemicals for medical, industrial, or research applications. These products are either directly produced by us or are purchased in bulk from other producers and distributed by us in customized packages and chemical forms tailored to meet customer and market demands. Iodine-131 radiochemical products account for the largest portion of sales within this segment. Our iodine-131 is supplied through an agreement with NTP Radioisotopes (Pty) Ltd. ( NTP ) in South Africa and is imported as a radiochemical intended for medical applications. Although there are other manufacturers of iodine-131,

in August 2013, we renewed our agreement with NTP for the supply of iodine-131 that allows us to purchase iodine at a mutually agreeable pre-determined price through July 2018. Either party may terminate the agreement by giving three months notice prior to the expiration of the term.

Generally, iodine-131 is used in the treatment and diagnosis of various diseases of the thyroid gland such as Graves disease, thyroid cancer and hyperthyroidism. There are also several investigational and clinical trials underway to explore the use of iodine-131 for such applications as the treatment of breast, lung, prostate, and ovarian cancers.

Other less significant sales of radiochemical in this segment consist of sales of isotopes such as Cobalt-57 (Co-57), Cesium-137 (Cs-137), Sodium-22 (Na-22), and Barium-133 (Ba-133).

### Fluorine Products

We established the fluorine products business segment in 2004 to support production and sale of the gases produced using our Fluorine Extraction Process ( FEP ). The FEP is a process that produces ultra-high-purity fluoride gas products through a solid-to-solid reaction between depleted uranium tetrafluoride ( DUF4 ) and various solid metal oxides such as silicon. High-purity fluoride gases are in ever-increasing demand for processes such as ion-implantation and chemical vapor deposition and also for the manufacture of organic complexes used in a host of industrial applications and manufacturing processes. The FEP products have very high purity, which makes them ideally suited to these specialty applications.

We acquired seven patents for the FEP in January 2004 and built a pilot production facility in Idaho that began operation in 2006. In 2010, we were granted an additional process patent on FEP based upon information gained through the operation of the pilot facility. Our pilot facility was not used for commercial gas production but instead focused upon production of high-purity products and examined methods of scaling up the size of the production operations in support of the proposed FEP facility in New Mexico. By the end of 2012, we had completed our testing of individual components and analytical processes and in April 2013, we shut down the pilot facility and terminated our lease on that property.

### Radiological Services

This segment includes a wide variety of miscellaneous services such as processing gemstones, decommissioning disused irradiation units, and sealed source exchange in irradiation and therapy units. In May 2004, we entered into an exclusive contract with Quali-Tech, Inc., for gemstone processing and, historically, this contract has accounted for the majority of sales in this segment. In May 2012, we modified and renewed the contract, which remains in effect until either party gives a minimum of six months notice to the other that it does not intend to continue the contract. The contract provides that we shall act as the exclusive processor of gemstones for Quali-Tech, Inc., for the term of the contract and two years beyond.

In 2012, we obtained an amendment to our NRC license that allows the performance of certain field service activities in connection with the DOE's Orphan Source Recovery Program ( OSRP ). These activities include services to support recovery of disused sources under the DOE's OSRP and installation or removal of certain cobalt therapy units. During 2013, we designed and built a mobile hot cell unit to use in this field service work and during 2014 used the unit to perform several OSRP field service jobs.

In March 2012, we completed an agreement for exclusive sales of radioactive material transportation containers through a worldwide distributor agreement with Alpha-Omega Services, Inc. ( AOS ), of Bellflower, California. The containers have been approved for use by the Nuclear Regulatory Commission ( NRC ), but distribution has been delayed due to minor manufacturing deficiencies. Sales of these containers are not expected to begin until at least mid-2015, if at all. There is also no assurance that we will acquire a container for use in our field services work.

Transportation

This segment was established in 2006 through our subsidiary, International Isotopes Transportation Services ( IITS ), to provide transportation of our products (such as cobalt sources) and to offer for hire transportation services of hazardous and non-hazardous cargo materials. A major factor in our determination to establish this subsidiary and business segment was the volume of regulations involving the security and tracking of shipments of cobalt. IITS provides us with considerable savings for the transportation of our own products and produces a small revenue stream through the transportation of products for other companies. We expect this segment to provide transportation for our expanding field services work and anticipate that this segment will also provide some of the transportation services for our planned depleted uranium de-conversion facility in New Mexico.

## **Uranium De-conversion Facility**

Beginning in 2004, we began a major undertaking to construct the first commercial uranium de-conversion facility in the U.S. At that time, it was our belief that such an undertaking would provide an excellent commercial opportunity to us in the future. In 2013, we placed this project on hold due to market conditions and the need for additional funding; however, we still consider this project to be an excellent future commercial opportunity.

In October 2012, we received the NRC construction and operating license for the planned de-conversion facility. This is a forty (40) year operating license and is the first commercial license of this type issued in the U.S. There are no other companies with a similar license application under review by the NRC and the license does not require the Company to begin construction of the project by any specific date. Therefore, the NRC license represents a significant competitive barrier and we believe that it provides us with a very valuable asset now and in the future when we are ready to resume formal design and engineering work on the plant.

There have been several changes in the nuclear industry that have caused us to place near-term engineering work on this de-conversion project on hold. When we began pursuing this project, there were three companies planning for construction of new commercial uranium enrichment plants in the U.S. and a fourth company using Silex laser separation technology, and we were communicating with all of them for possible de-conversion agreements to process their tails. These facilities included AREVA Inc. s ( AREVA ) planned Eagle Rock Facility in Idaho Falls, Idaho, URENCO USA s ( UUSA ) (formerly known as Louisiana Energy Services or LES ) Eunice, New Mexico, facility, United States Enrichment Corporation s ( USEC ) American Centrifuge project in Piketon, Ohio, and GE-Hitachi s use of a Silex laser separation technology in Wilmington, North Carolina. We were successful in executing a de-conversion service agreement with UUSA that would use approximately 50% of the installed processing capacity of our proposed de-conversion facility. However, plans to obtain additional contracts with the other enrichment companies in order to commit 100% of the planned facility s capacity have been delayed because of the slowdown in nuclear industry growth. Having contracts in place is necessary for us to obtain funding for the project. In addition, both the Fukushima, Japan, disaster and low natural gas prices in the U.S. continue to negatively impact growth in the nuclear industry and there is no serious discussion of constructing additional nuclear capacity in the U.S. in the near term. However, we believe that the overseas outlook for nuclear power expansion is quite different. For example, South Korea has announced plans to increase its nuclear capacity, China has completed safety and regulatory review of proposed new plants and is expected to add a significant number of new plants in the coming years and two new plants were approved in 2014 for construction in the United Kingdom. And although the three other commercial enrichment companies that we were in discussions with to secure de-conversion contracts have not moved forward with their plans in the U.S., none of them have officially cancelled construction plans. We believe that one or more of these companies are likely to resume construction plans on their new enrichment facilities in the next few years and when they do, we will resume contract talks to commit the remaining capacity for our planned de-conversion facility and continue efforts to obtain project financing to proceed with the design and construction of the de-conversion facility in Hobbs, New Mexico. In the meantime, we will focus our efforts upon our other business segments and continue to work towards achieving profitability in those areas.

## **Industry Overview, Target Markets, and Competition**



The industries and markets that require or involve the use of radioactive material are diverse. Our current core business operations involve products that are used in a wide variety of applications and in various markets. The following provides an explanation of the markets and competitive factors affecting our current business segments.

### Nuclear Medicine Standards

Calibration and Reference Standards are required for the daily operational checks and calibration of the measurement of SPECT imaging devices frequently used in nuclear medicine. Calibration and quality assurance testing is required as a routine part of the normal operations of this equipment to ensure its reliability and accuracy. We exclusively manufacture many of these reference standard products for one customer, RadQual, which in turn has several distributors who make direct sales around the U.S. and internationally. We directly ship these products to all 50 states and several overseas locations. There is only one other producer of these products in the world that directly competes with us for these products. Most of the products manufactured by our competitor are similar in design to our products because all must meet Original Equipment Manufacturer ( OEM ) dimensional and performance standards. However, we attempt to differentiate our products from our competitor's products through increased levels of quality control and customer service. We received ISO-9001:2008 and ISO-13485-2003 quality program certifications in 2011 that have allowed us to start selling these products into several foreign countries that require this additional quality certification for manufacturers. We use a small number of suppliers for the isotopes and other materials used in manufacturing these nuclear medicine products, and if we were to lose any of these suppliers, others would be available.

In December 2010, we formed TI Services, LLC, a joint venture with RadQual, which is expected to continue as a major distributor of products in the field of nuclear medicine and nuclear cardiology. Although TI Services reported net losses for the years 2011 through 2013, as a result of continued efforts to enhance marketing and trim operating costs, it reported a net profit for 2014.

In 2014, we began selling a new lightweight flood source, the Rad-Lite, that we developed in collaboration with RadQual. This new product was introduced to the market in April 2014 and is being marketed by TI Services, LLC, which we believe provides a good opportunity to further improve its financial performance for 2015.

### Cobalt Products

Historically, we have sold high-activity bulk cobalt to a customer that used it to fabricate several models of sealed sources for medical and industrial applications. However, due to problems at the DOE's ATR during 2012, we were forced to discontinue the irradiation of our in-process cobalt targets and therefore recorded no bulk cobalt sales during 2013 or 2014. In December 2013, we were able to transfer several targets from the ATR, where they were being held, to our facility in Idaho Falls, ID. With this cobalt material we were able to obtain in 2013 we manufactured a wide range of sealed source products through the beginning of 2014. These products include applications such as radiation therapy, security examination, and blood sterilization. While there are other technologies available to provide external radiation therapy, there are several state-of-the-art devices that continue to depend on cobalt sources for several specialized applications. There are currently no other producers of high specific activity cobalt in the U.S. However, there are at least three significant producers in other parts of the world. There is only one other company in the U.S. currently licensed to handle large quantities of cobalt.

In October of 2014, we were able to establish a new ten year cobalt production agreement with the DOE. Since that time, we have been in negotiations with customers that will commit them to annual purchases of this cobalt beginning in 2017 when the first of this new material becomes available.



In addition to manufacturing cobalt sources, we recycle used cobalt sources by recovering the cobalt for re-use in the manufacture of new sealed sources for teletherapy devices, irradiators, and other source applications. We are the only company in the U.S. that provides this unique service. There has been a significant increase in regulation by the NRC in recent years that has created a significant barrier to any new entrants to this market. We expect growth in the demand for cobalt in several of the newer applications, and coupled with an expected decline in reactors around the world that are capable of producing this type of high-activity material, we expect increased demand for our cobalt products in the next 5 years. Nonetheless, we are at present dependent upon our contract relationship with the DOE for access to its ATR in Idaho for continued cobalt production. The interruption to cobalt production experienced in 2012 had a significant negative impact on our Cobalt Products business segment, and although we currently have a ten-year irradiation contract in place with the DOE, future interruptions in the operation of the ATR could have a negative impact on our cobalt products business segment. We are currently the only producer of high specific activity cobalt in the U.S. With our new cobalt production contract in place with the DOE and our cobalt product manufacturing capabilities, we anticipate our market position in this business segment to grow.

### Radiochemical Products

We typically supply radiochemical products in bulk form. The markets for most radiochemicals are highly competitive. The target markets for these products are customers who (1) incorporate them into finished industrial or medical devices; (2) use radioisotope products in clinical trials for various medical applications; or (3) further process and include the radioisotope products into a pharmaceutical product for U.S. Food and Drug Administration ( FDA ) approved therapy or imaging. We are the only U.S. company that supplies iodine-131 radiochemical directly to radiopharmacies. There is one major foreign company that produces a similar pharmaceutical product that competes with our sales. Continuation of business in this segment is highly dependent upon maintaining a low-cost, high-quality product meeting all of the current Good Manufacturing Practices ( cGMP ). The Company is also taking steps to advance into the manufacture of generic drug products using these basic radiochemicals.

### Fluorine Products

Our Fluorine Products segment was developed in conjunction with uranium de-conversion in order to take advantage of the anticipated need for depleted uranium de-conversion services. Our FEP patents provide a unique opportunity to provide certain high-purity fluoride compounds while also offering a for fee de-conversion service to the uranium enrichment industry. Although during 2013 we curtailed the formal engineering work on the planned de-conversion facility, we believe that in the future there will be a resumption of nuclear growth overseas that will positively impact the front end of the nuclear fuel cycle. Once that occurs the ground work we have completed on the depleted uranium de-conversion and fluorine extraction project should put us in an excellent position to take advantage of our position in the industry and should serve to justify the financial investment in this uranium de-conversion project in the future.

During 2012, we completed testing of certain process parameters and demonstrated the purity of the FEP products and in 2013 we closed our pilot facility in Idaho Falls, ID, and terminated our lease on that property.

### Radiological Services

Historically, most of our radiological services have been performed in support of gemstone processing for Quali-Tech, Inc. Gemstone processing has fluctuated in recent years but has remained a significant contributor to this segments revenue. We anticipate typical gemstone processing revenues in 2015.

In 2012, we obtained our first amendment to our NRC license to permit certain field service activities and since that time radiological field service work has become a significant contributor to revenue within the segment. In both 2013 and 2014 we were awarded several contracts for field service activities in connection with the Orphan Source Recovery Project (OSRP). In 2013, we designed and built a mobile hot cell unit for use in this field service work and during 2014 were granted an additional amendment to our NRC licenses that will allow us to use the hot cell to perform source removal services on a range of teletherapy models. In 2015 we will be working to further increase these field service opportunities in the U.S. and abroad and expect that field services will be the major source of revenue within this business segment.

While there are other companies that compete with us for field services, we believe the addition of the portable hot cell gives us a unique competitive advantage in this area.

### Transportation

IITS was formed in order to support transportation of our own products and to provide for hire transportation services. IITS specializes in the transportation of hazardous, radioactive materials including large cobalt shipments. These types of shipments face a significant amount of increased new regulation and enhanced security requirements and IITS is well suited to meeting these requirements while significantly reducing the costs of transport to us. IITS has specially trained drivers and specially equipped vehicles intended to meet the new standards for transportation of large cobalt shipments. Therefore, IITS is capable of providing unique transportation services that we believe only one or two other commercial carriers in the U.S. can also provide. The transportation segment directly supports the sale and delivery of our cobalt products and the conduct of field service projects.

### **Government Regulation**

#### *Licensing*

We have obtained two broad scope materials licenses from the NRC that permit use and possession of by-product material, as well as licenses that permit the exempt distribution of irradiated gemstones, import and export of certain radioactive materials, a wide range of field service activities, and Type B shipments of radioactive materials. The first broad scope material license covers calibration and reference standard manufacturing and distribution, radioisotope processing and distribution, large scale cobalt processing and recycle operations, radioactive gemstone processing, environmental sample analysis, certain field service activities, and research and development. The second broad scope materials license specifically covers FEP production under our subsidiary, International Isotopes Fluorine Products, Inc. This license is specific to the handling of fairly large quantities of depleted uranium in various chemical forms. The exempt distribution license permits the direct release of irradiated gemstones into the U.S. All of our existing licenses and permits are adequate to allow current business operations. As a condition of our NRC licenses in Idaho, we are required to provide financial assurance for decommissioning activities. In the past, we fulfilled this license requirement with a surety bond. However, in November 2014, the surety bond was replaced with a letter of credit which names the NRC as beneficiary. The Letter of Credit is supported by a restricted certificate deposit. We do not handle special nuclear materials (i.e. nuclear fuels and weapons grade uranium, thorium or plutonium); therefore, our facility is not designated as a nuclear facility that would require additional licensing.

In October 2012, we were granted a Part 40 construction and operating license by the NRC for the proposed depleted uranium de-conversion and FEP production facility. The facility, which is to be located in Lea County, New Mexico,

is proposed to initially de-convert up to approximately 11 million pounds of depleted uranium hexafluoride (  $DUF_6$  ) annually into fluoride products and depleted uranium oxides (  $DUO$  ). Further engineering work on this facility was placed on hold in 2013 until additional contracts for utilization of the facility can be obtained. There is no specific timeline required by the NRC for the start of construction on this project. The planned uranium de-conversion facility will require a ground water permit from the state of New Mexico before operation.

*Regulation of Radioisotope Production Waste*

All of our manufacturing processes generate some radioactive waste. We must handle this waste pursuant to the Low Level Radioactive Waste Policy Act of 1980, which requires the safe disposal of mildly radioactive materials. The estimated costs for storage and disposal of these materials have been included in the manufacturing and sales price of our products. However, actual disposal costs are subject to change at the discretion of the disposal site and are ultimately applied at the time of disposal. We have obtained all necessary permits and approvals for the disposal of our waste materials and we do not anticipate any negative changes in capacity or regulatory conditions that would limit or restrict our waste disposal capabilities.

We have a Standby Letter of Credit with Wells Fargo Bank in place, supported with incremental funding that will provide the financial assurance required by the NRC for our Idaho facility license for decommissioning upon termination of operations. A similar mechanism will be required to fund the decommissioning of the proposed facility in New Mexico.

#### *Other Regulations*

We are registered as a medical device manufacturer through the FDA for several of our nuclear medicine reference and calibration standards. We are registered with the U.S. Department of Transportation for the shipment of radioactive materials. We also have an NRC license for the import and export of radioactive materials. Because of increasing security controls and regulations, it is likely that we may encounter additional regulations affecting transportation, storage, sale, and import/export of radioactive materials. We are also subject to inspection by the FDA and are registered with the FDA as an Active Pharmaceutical Ingredient ( API ) manufacturer. Our Idaho Falls facility is also registered with the FDA as a Manufacturing facility.

We are subject to government regulation and intervention both in the United States and in all foreign jurisdictions in which we conduct business. Compliance with applicable laws and regulations results in higher capital expenditures and operating costs and changes to current regulations with which we must comply can necessitate further capital expenditures and increases in operating costs to enable continued compliance.

#### **Employees**

As of December 31, 2014, we had 24 total employees including 23 full-time employees.

#### **Distribution Methods for Products**

We sell our products directly to our customers who, in some cases, are both end users and distributors. We use common commercial carriers and our own IITS subsidiary for delivery of our products. For smaller quantities of material, and overnight and next-day delivery, we utilize other commercial carriers. For our products that involve large quantities of radioactive material, most commonly cobalt-60, that invoke certain special transportation requirements, we use our IITS transportation subsidiary. The creation of the IITS subsidiary has produced additional revenue in for-hire operations and decreased costs by allowing us to transport our own products more cost-effectively than other commercial carriers.



## Dependence on Customers

During 2014, one major customer, RadQual, accounted for 44% of our total gross revenue. This total includes both sales under an exclusive sales agreement with RadQual and its sales as a distributor of our products and also includes sales reported by TI Services, LLC, our joint venture with RadQual. Historically, the majority of the radiochemical products sold by the Company were done so through a supply agreement with a single entity. In September 2014, upon mutual agreement, we ended a supply agreement with RadQual and began direct sales to its customers of all radiochemical products.

Sales under exclusive contract with RadQual were approximately 25%, of our total gross revenues for both years ended December 31, 2014 and 2013. Combined sales, on which we are dependent, to our three largest customers, accounted for 46% of our total gross revenues in 2014 and accounted for 55% of our total gross revenues in 2013. We are making efforts to reduce our dependency on a small number of customers by expanding sales in both domestic and foreign markets and through our establishment of the joint venture, TI Services, to expand distribution of products.

We also have one sales agreement in place and are currently working on additional sales and service agreements that we expect will expand the sale of cobalt products and services and create additional opportunities for revenue from expanded radiological services.

## **Patents, Trademarks, Licenses and Royalty Agreements**

In 2004, we obtained certain patents related to the FEP. In July 2010, we were granted a new patent on the FEP process which provides patent protection of this intellectual property through 2019. These patents will be important to our future plans to build upon FEP production capacity including our planned construction of the first commercial depleted uranium de-conversion and fluorine extraction facility in the U.S. We believe this will provide a commercial opportunity once companies resume planning and construction of any new uranium enrichment facilities in the U.S.

In 2009, patent applications were made in Brazil, Canada, China, Europe, Japan, Russia, and South Africa. In 2013, the FEP process patent was granted in Russia and in 2014 the FEP process patent was approved in South Africa. The applications in all of the other countries mentioned above are still in process.

In March 2014, the Company submitted an application to the U.S. Trademark and Patent office for protection of the name <sup>3</sup>Iodine Max for our generic sodium iodide product. In February 2015, that trademark was approved and the Company will be marketing this trademark name after the U.S. Food and Drug Administration's approval of our generic sodium iodide product.

## **Research and Development**

We had research and development expenses totaling \$464,206 in 2014, compared with \$706,048 in 2013. These expenses were primarily associated with current product development activities related to generic radiochemical products.

## **Available Information**

Our internet website address is <http://www.internationalisotopes.com>. Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the Exchange Act) are available free of charge through our website as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. Information on our website is not incorporated by reference into this report or other reports filed with the SEC.

## **Item 1A. RISK FACTORS**

*Readers should carefully consider the following factors that may affect our business, future operating results and financial condition, as well as other information included in this Annual Report. The risks and uncertainties described below are not the only ones the Company faces. Additional risks and uncertainties not presently known to us or that we currently deem immaterial also may impair our business operations. If any of the following risks actually occur, our business, financial condition and operating results could be materially adversely affected.*

### **Risks Related To Our Current Business Operations**

***We are dependent on various third parties in connection with our business operations.*** The production of high-specific activity cobalt is dependent upon the DOE, and its prime-operating contractor, which controls the Idaho reactor. Current activity at the Idaho ATR may continue to affect the supply of cobalt material needed for the manufacture of cobalt sources. Loss of the ability to use, or cost-effectively use, these irradiation services would significantly impact our cobalt products business segment because there is not currently another reactor available in the United States that is capable of providing this type of service for us. Our nuclear medicine calibration and reference standard manufacturing is conducted under an exclusive contract with RadQual, which in turn has agreements in place with several companies for marketing and sales. Our radiochemical iodine is supplied through two supply sources. Unanticipated contract terminations by any of these suppliers and other third parties would have a material adverse impact on our operations, financial results, and cash flow.

***We are dependent on a limited number of customers in connection with our current business operations.*** During 2013 and 2014 sales to RadQual represented 44% of our total gross revenues for each year. Combined sales to our three top customers accounted for 46% of our total gross revenues during 2014, and combined sales to our top three customers accounted for 55% of gross revenue in 2013. Although we are making efforts to reduce our dependency on a small number of customers, the loss of any one of these customers could have a significant impact on our future results of operations and financial condition. Unanticipated contract terminations by any of these current customers could have a material adverse impact on operations, financial results, and cash flow.

***We are subject to competition from other companies.*** Each of our existing business areas has direct competition from other businesses. High-specific activity cobalt is supplied by other reactor facilities around the world. Nuclear medicine calibration and reference standards are being produced by one other major manufacturer in the United States. Most of our radiochemicals are also manufactured by several other companies in the world, and there are other suppliers of high-purity fluoride products. Each of our competitors has significantly greater financial resources that could give them a competitive advantage over us.

### **Risks Related To Our Company Generally**

***We have incurred, and may continue to incur, losses.*** With the exception of 2002, we have incurred net losses for most fiscal periods since our inception. From inception through December 31, 2014, we have generated \$83,613,745 in revenues and an accumulated deficit (including preferred stock dividends and returns) in the amount of \$118,242,224. The negative cash flow we have sustained has materially reduced our working capital, which in turn could materially and negatively impact our ability to fund future operations and continue to operate as a going concern. Management has taken and continues to take actions to improve our results. The availability of necessary working capital, however, is subject to many factors beyond our control, including our ability to obtain favorable financing, economic cycles, market acceptance of our products, competitors' responses to our products, the intensity of competition in our markets, and the level of demand for our products.

***Our operations expose us to the risk of material environmental liabilities.*** We are subject to potential material liabilities related to the remediation of environmental hazards and to personal injuries or property damages that may be caused by hazardous substance releases and exposures. The materials used in our operations subject us to risks of environmental contamination that subject us to liability, including remediation obligations that could be very costly. In addition, the discovery of previously unknown contamination could require us to incur costs in the future that would have a negative effect on our financial condition or results of operations. We have a Standby Letter of Credit in place supported by funds in a restricted certificate of deposit to provide the financial assurance required by the NRC for our Idaho facility license for decommissioning and a similar mechanism will be required to fund the decommissioning of the proposed new facility. However, if a contamination event occurred within, or outside of, our facility we would be financially responsible to remediate such contamination and could have to borrow money or fund the remediation liability from our future revenue. We may not be able to borrow the funds, or have available revenue, sufficient to meet this potential liability, which could have a significant negative impact on our results of operations.

***We are dependent upon key personnel.*** Our ongoing operations are dependent on Steve T. Laflin, President and Chief Executive Officer. The loss of Mr. Laflin could have a material adverse effect on our business. We have a \$2 million key man life insurance policy on Mr. Laflin and an employment agreement that extends through February 28, 2017. However, there is no assurance that we will be able to retain Mr. Laflin or our existing personnel or attract additional qualified employees. The loss of any of our key personnel or an inability to attract additional qualified employees could result in a significant decline in revenue.

**General economic conditions in markets in which we do business can impact the demand for our goods and services. Decreased demand for our products and services can have a negative impact on our financial performance and cash flow.** Demand for our products and services, in part, depends on the general economic conditions affecting the countries and industries in which we do business. A downturn in economic conditions in the U.S. or industry that we serve may negatively impact demand for our products and services, in turn negatively impacting our operations and financial results. Further, changes in demand for our products and services can magnify the impact of economic cycles on our businesses. For instance, our topaz gemstone processing is affected by the demand for luxury items such as jewelry as well as by the instability of foreign markets which are key in the manufacture of products using irradiated gemstones.

**Volatility in raw material and energy costs, interruption in ordinary sources of supply and an inability to recover unanticipated increases in energy and raw material costs from customers could result in lost sales or significantly increase the cost of doing business.** Market and economic conditions affecting the costs of raw materials, utilities, energy costs, and infrastructure required to provide for delivery of our goods and services are beyond our control and any disruption or halt in supplies, or rapid escalations in costs could affect our ability to manufacture products or to competitively price our products in the marketplace. For instance, an interruption in the supply of isotopes such as cobalt-57, cobalt-60, or iodine-131 could result in lost sales of nuclear medicine and calibration standards sales and radiochemical products.

**We are subject to extensive government regulation in jurisdictions around the globe in which we do business. Regulations address, among other things, environmental compliance, import/export restrictions, healthcare services, taxes and financial reporting, and can significantly increase the cost of doing business, which in turn can negatively impact our operations, financial results and cash flow.** We are subject to government regulation and intervention both in the United States and in all foreign jurisdictions in which we conduct business. Compliance with applicable laws and regulations results in higher capital expenditures and operating costs and changes to current regulations with which we must comply can necessitate further capital expenditures and increases in operating costs to enable continued compliance. Additionally, from time to time, we may be involved in legal or administrative proceedings under certain of these laws and regulations. Significant areas of regulation and intervention include the following:

**Radioactive Waste.** All of our manufacturing processes generate some radioactive waste. We must handle this waste pursuant to the Low Level Radioactive Waste Policy Act of 1980, which requires the safe disposal of mildly radioactive materials. The estimated costs for storage and disposal of these materials have been included in the manufacturing and sales price of our products. However, actual disposal costs are subject to change at the discretion of the disposal site and are ultimately applied at the time of disposal. The NRC is revising its regulations on the disposal of depleted uranium waste at LLRW disposal facilities that accept substantial quantities of depleted uranium. If commercial LLRW disposal facilities are not readily available to us, we may not be able to provide the de-conversion services at the level assumed by our business model.

**Health Compliance.** Health regulations, dictated by the United States Occupational Safety and Health Administration and NRC are extensive in our business. There is no assurance that our activities will not at times result in liability under health regulations. Costs and expenses resulting from such liability may materially negatively impact our operations and financial condition. Overall, health laws and regulations will continue to affect our business

worldwide.

***Environmental Regulation.*** We are subject to various federal, state, local and foreign government requirements regulating the discharge of materials into the environment or otherwise relating to the protection of the environment. These laws and regulations include, but are not limited to the Comprehensive Environmental Response, Compensation, and Liability Act, the Resource Conservation and Recovery Act and state statutes such as the Idaho Hazardous Waste Management Act, the Low Level Radioactive Waste Policy Act of 1980, NRC regulations concerning various irradiated, radioactive, and depleted uranium materials, and United States Department of Transportation regulations concerning shipment of radioactive materials. Certain of these laws and regulations can impose substantial fines and criminal sanctions for violations, and require installation of costly equipment or operational changes to limit emissions and/or decrease the likelihood of accidental hazardous substance releases. We incur, and expect to continue to incur, capital and operating costs to comply with these laws and regulations. In addition, changes in laws, regulations and enforcement of policies, or the imposition of new clean-up requirements or remedial techniques, could require us to incur costs in the future that would have a negative effect on our financial condition or results of operations.

***Import/Export Regulation.*** We are subject to significant regulatory oversight of our import and export operations due to the nature of our product offerings. Penalties for non-compliance can be significant and violations can result in adverse publicity. We also have an NRC license for the export of radioactive materials. Because of increasing security controls and regulations, it is likely that we may encounter additional regulations affecting transportation, storage, sale, and import/export of radioactive materials.

***Taxes.*** We structure our operations to be tax efficient and to make use of tax credits and other incentives. Nevertheless, changes in tax laws, actual results of operations, final audit of tax returns by taxing authorities, and the timing and rate at which tax credits can be utilized can change the rate at which we are taxed, thereby affecting our financial results and cash flow.

***Financial Accounting Standards.*** Our financial results can be impacted by new or modified financial accounting standards.

***We may incur material losses and costs as a result of product liability claims that may be brought against us.*** We face an inherent business risk of exposure to product liability claims in the event that products supplied by us fail to perform as expected or such failures result, or are alleged to result, in bodily injury. Although we have purchased insurance with coverage and in amounts that we believe to be adequate and reasonable in light of our current and planned operations, including our new uranium de-conversion and fluoride gas production business, if a successful product liability claim were brought against us in excess of our available insurance coverage or established reserves, it would have a material adverse effect on our business and financial results.

***We may need additional financing to continue operations.*** Because we may continue to experience negative cash flow, we may need to obtain additional financing to continue operations. Management will continue to plan and take actions to improve our financial results which could enhance our ability to obtain debt financing. However, obtaining



additional financing is subject to many factors beyond our control and may not be available to us on acceptable terms or at all.

***Our earnings, cash flow and financial position are exposed to financial market risks worldwide, including interest rates.*** Fluctuations in domestic and world markets could adversely affect interest rates and impact our ability to obtain credit or attract investors. Such market risk could have a negative impact on future business opportunities including our ability to raise additional capital for planned business expansion. We also purchase some of our radiochemical products from overseas suppliers and the price of those products could be adversely affected through changes in currency exchange rates.

***Catastrophic events such as natural disasters, pandemics, war and acts of terrorism could disrupt our business or the business of our suppliers or customers, and any such disruptions could have a negative impact on our operations, financial results and cash flow.*** Our operations are at all times subject to the occurrence of catastrophic events outside our control, ranging from severe weather conditions such as hurricanes, floods, earthquakes and storms, to health epidemics and pandemics, to acts of war and terrorism. Any such event could cause a serious business disruption that could affect our ability to produce and distribute our products and possibly expose us to third-party liability claims. Additionally, such events could impact our suppliers, thereby causing energy and raw materials to become unavailable to us, and our customers, who may be unable to purchase or accept our products and services. Any such occurrence could have a negative impact on our operations and financial condition.

***Our future growth is largely dependent upon our ability to develop new technologies that achieve market acceptance with acceptable margins.*** Our businesses operate in global markets that are characterized by rapidly changing technologies and evolving industry standards. Accordingly, our future growth rate depends upon a number of factors, including our ability to (i) identify emerging technological trends in our target end-markets, (ii) develop and maintain competitive products, (iii) enhance our products by adding innovative features that differentiate our products from those of our competitors, and (iv) develop, manufacture, and bring products to market quickly and cost-effectively. Our ability to develop new products based on technological innovation can affect our competitive position and requires the investment of significant resources. These development efforts divert resources from other potential investments in our businesses, and they may not lead to the development of new technologies or products on a timely basis or that meet the needs of our customers as fully as competitive offerings. In addition, the markets for our products may not develop or grow as we currently anticipate. The failure of our technologies or products to gain market acceptance due to more attractive offerings by our competitors could significantly reduce our revenues and adversely affect our competitive standing and prospects.

## **Risks Related To Our Common Stock**

***Trading in our common stock is limited and the price of our common stock may be subject to substantial volatility.***

Our common stock has historically been quoted on the Over The Counter Bulletin Board® ( OTCBB ) under the ticker symbol INIS.OB. In February 2015, we listed our common stock on the OTCQB Marketplace under the U.S. trading symbol INIS . The market for our securities is limited, the price of our stock is volatile, and the risk to investors in our common stock is greater than the risk associated with stock trading on other markets. These factors may reduce the potential market for our common stock by reducing the number of potential investors. This may make it more difficult for investors in our common stock to sell shares to third parties or to otherwise dispose of their shares. This could cause our stock price to decline.

***We currently do not intend to pay dividends on our common stock.*** We do not plan to pay dividends on shares of our common stock in the near future. Consequently, an investor in our common stock can only achieve a return on its investment in us if the market price of our common stock appreciates.

***We are contractually obligated to issue shares in the future, which will dilute your interest in us.*** As of December 31, 2014, there were approximately 18,720,833 shares of common stock issuable upon exercise of vested stock options outstanding, at a weighted-average exercise price of \$.06 per share. An additional 1,397,774 shares were reserved for issuance under our 2006 Equity Incentive Plan and our International Isotopes Inc. Employee Stock Purchase Plan as of December 31, 2014. We expect to issue additional options to purchase shares of our common stock to compensate employees, consultants and directors, and we may issue additional shares to raise capital to fund design, licensing and construction of our planned uranium de-conversion plant. Any such issuances will have the effect of further diluting the interest of the holders of our securities. Also outstanding as of December 31, 2014, are Series H Warrants for the issuance of 1,913,892 shares of common stock, Series I Warrants for the issuance of 12,924,887 shares of common stock, Series K warrants for the issuance of 2,419,172 shares of common stock, and Series L warrants for the issuance of 25,000,000 shares of common stock.

**Risks Related to Our Proposed De-Conversion and FEP Produced Fluoride Gas Business**

*We will need to raise additional funds to complete the construction of our de-conversion and FEP facility.* We need to secure more customer contracts and raise approximately \$125 million in additional funds to complete the design and construction of a de-conversion facility with a production-scale FEP operation. We may not be able to raise the additional capital required to complete the facility on acceptable terms, or at all. In addition, the total funds required to complete this project have been based upon early preliminary estimates and, while we believe these estimates are conservative, there can be no assurance that unforeseen expenses will not be incurred and additional funding will not be required to complete the project.

*We do not have an operating history with respect to our strategy to combine de-conversion services and FEP-produced fluoride gas products and this business may not succeed.* We have no operating results with respect to providing de-conversion services or producing high volumes of fluoride gas products using FEP to date and, therefore, we do not have an operating history upon which you can evaluate this business or our prospects. Our prospects must be considered in light of the risks and uncertainties encountered in entering a new line of business.

Some of these risks relate to our potential inability to:

construct our planned de-conversion and FEP production plant, including the effective management of the cost of the design and construction of the facility, and obtain the additional financing necessary for such construction;

maintain the necessary regulatory approvals for the facility and the ongoing operations of the facility;

obtain the groundwater permit from the state of New Mexico;

produce commercially economic volumes of high-purity fluoride products using FEP;

effectively manage this new business and its operations;

successfully establish and maintain our intended low-cost structure; and

successfully address the other risks described throughout this Annual Report.

If we cannot successfully manage these risks, our business and results of operations and financial condition will suffer.

***The market for our de-conversion services may be adversely affected if planned enrichment facilities that would create by-products suitable for our de-conversion services are not completed.*** We plan to build a de-conversion and FEP production plant, in part, to process the anticipated  $\text{DUF}_6$  by-product from certain enrichment facilities being planned by several companies, including USEC, AREVA and GE-Hitachi Nuclear Energy's Global Laser Enrichment. Although many of our performance milestone dates have passed, we still have an agreement in place with UUSA, which is currently operating. We continue to seek additional contracts to utilize the full capacity of our planned facility and once additional contracts are obtained we plan on updating the agreement with UUSA. If none of the other anticipated enrichment facilities are completed, we may not have sufficient demand for our de-conversion services to realize the expected economic benefit from our planned de-conversion and FEP production plant.

***We currently have only one contract to provide de-conversion services to an enrichment firm.*** We currently have only one de-conversion services agreement with UUSA. The agreement is conditional upon, among other things, each party obtaining necessary third party and government approvals, UUSA obtaining the approval of the NRC to the amendment of a provision in its materials license that prohibits shipments of depleted uranium to de-conversion facilities employing anhydrous hydrofluoric acid in the de-conversion process, and our meeting certain performance milestones in the construction and start-up of the planned facility. The initial term of the agreement extends for a period sufficient to cover five years of de-conversion services once our planned uranium de-conversion facility is operational, based on operations that were to have started no later than January 1, 2014. UUSA has indicated they will amend the agreement commitment dates once we secure an additional de-conversion agreement and establish firm dates for start of construction. Because the start of construction of the project has been delayed, and we did not meet the January 1, 2014 deadline, we will need to renegotiate this term of the contract with UUSA. If we cannot demonstrate certain production capacities in accordance with the agreement, UUSA has the option to terminate the agreement and we would have no opportunity to cure pursuant to the terms of the agreement.

***There is no history of large-scale commercial fluoride gas production utilizing FEP.*** We have successfully demonstrated the feasibility of using FEP to produce some fluoride gases and Starmet Corporation ( Starmet ), which originally developed and patented the technology, also used FEP to produce a fluoride gas. However, FEP has not been used for large-scale commercial production of the size and magnitude envisioned in conjunction with the de-conversion process and there may be technical issues and process challenges related to the utilization of FEP for large-scale commercial production. Unforeseen issues associated with constructing and scaling up these new FEP operations could significantly impact our proposed schedule and our overall ability to produce high-purity fluoride gas in the quantities anticipated.

***Prior to the start of operations of the facility, we must obtain a Ground Water Permit from the State of New Mexico, and we cannot guarantee the amount of time required to obtain this permit from the State of New Mexico for operation of these facilities.*** The operation of the planned depleted uranium de-conversion facility requires a ground water permit from the State of New Mexico. There is no assurance that the ground water permit will be issued to us by the State of New Mexico. We also have no control over the actual time required by the State of New Mexico to review and approve the application for the ground water permit. Failure to obtain the permit, or any delay in obtaining the permit, could delay the construction of our planned depleted uranium de-conversion facility, thereby delaying revenue-generating operations at the facility.

***The DOE is obligated to take depleted uranium from enrichment companies.*** The DOE has constructed two depleted uranium de-conversion facilities. These facilities are obligated to process depleted uranium produced from United States commercial uranium enrichment facilities. We cannot assure you that enrichment companies will not select the DOE as their de-conversion service provider. If we are unable to meet the milestones required by our de-conversion services agreement with UUSA and it terminates that agreement, and other enrichment companies select the DOE as their de-conversion services provider, we will not be able to realize the expected economic benefit from our planned de-conversion and FEP production plant.

***We will be handling large quantities of DUF<sub>6</sub> and fluoride gases, which are radioactive and hazardous materials, respectively, and are subject to intense regulation.*** The hazardous nature of DUF<sub>6</sub> and fluoride gases affects the actions we are required to take for licensing, air permitting, environmental review, emergency response, liability

insurance, personnel training, and generally increases the level of concern by the general public with respect to our handling of these materials. All of these factors complicate the licensing and operations processes and involve a host of additional regulatory factors that could affect the timeline for completing our de-conversion and FEP facility and cost estimates, and involve political pressures that could negatively influence operations. Additionally, the NRC is revising its regulations on the disposal of depleted uranium waste at Low Level Radioactive Waste ( LLRW ) disposal facilities that accept substantial quantities of depleted uranium. Any changes to the current regulations may result in increased disposal costs that we intend to pass through to our customers, which, depending on the significance of the increased cost, may cause potential customers to continue to store their DUF<sub>6</sub> rather than pay for de-conversion and disposal services.

***We will be subject to competition from the DOE and other companies.*** While there are no currently operating commercial DUF<sub>6</sub> de-conversion facilities in the United States, the DOE is operating two de-conversion plants intended to process DUF<sub>6</sub> from the DOE's existing 1.5 billion-pound stockpile. Additionally, AREVA currently operates a de-conversion plant in France, UUSA is constructing a facility in the U.K., and the State Atomic Energy Corporation ROSATOM has constructed a facility in Russia. We cannot assure you that the operators of the existing DUF<sub>6</sub> de-conversion facilities will not build additional facilities to expand their operations and compete with us in providing de-conversion services or that commercial enrichment companies will not choose to ship their depleted DUF<sub>6</sub> overseas for processing in France, the U.K., or Russia.

***We currently hold conditional title to the property in Lea County, New Mexico where the proposed plant is to be constructed.*** The property location for our planned facility is located in Lea County, New Mexico. Lea County, New Mexico has transferred the property to us under the provisions of the New Mexico Local Economic Development Act, Project Participation Agreement. We were obligated to meet certain performance objectives; namely starting Phase I construction no later than December 31, 2014, completing Phase I and hiring at least 75 employees by December 31, 2015, in order to retain title to the property. Since we did not begin construction on the project as of December 31, 2014, we have initiated discussions with Lea County to extend the deadlines in that agreement. While Lea County has indicated its willingness to amend the agreement dates, at this time the agreement has not been revised. If the agreement is not revised, we would have an option to purchase the property at its appraised value or let ownership revert to the county. If we do not retain title to the property, it could have a material adverse impact on our planned de-conversion and FEP project since another location would need to be selected and evaluated for environmental compliance.

***After completing Phase I of our planned de-conversion and FEP production facility, we may not have sufficient earnings to complete additional planned phases of the facility.*** We plan to integrate the de-conversion of DUF<sub>6</sub> with FEP in multiple phases. After funding Phase I, we plan to fund additional phases through earnings. If we do not realize the earnings necessary to fund these additional phases, we may need to find other sources of capital. We cannot assure you that we will be able to raise the additional capital required to complete these phases on acceptable terms, or at all. In addition, the total funds required to complete these phases have been based upon early preliminary estimates and there can be no assurance that unforeseen expenses will not be incurred and any additional funding required to complete these phases will be obtained.

***Our business may be harmed if we fail to protect our proprietary FEP technology utilized in our planned de-conversion and FEP production facility.*** We rely on patents to protect our intellectual property rights to the FEP technology to be used in our planned de-conversion and FEP production plant. Although we have filed international Patent Cooperation Treaty ( PCT ) applications to seek international protection for the FEP process in certain countries, we cannot be certain that our competitors will not be able to design around our patents and that the laws of some countries in which our FEP patents are or may be practiced will protect our products or intellectual property rights to the same extent as do the laws of the United States, increasing the possibility of piracy of our patents. Although we intend to vigorously defend our intellectual property rights, we may not be able to prevent misappropriation of our FEP technology. Our competitors may also independently develop technologies that are substantially equivalent or superior to our technology.



**Item 1B. UNRESOLVED STAFF COMMENTS**

We are a smaller reporting company, and therefore, are not required to provide the information required by this item.

**Item 2. PROPERTIES**

We lease one property which serves as our main corporate headquarters and houses all of our current manufacturing operations. We also hold the conditional title to 640 acres of land in Lea County, New Mexico. The following paragraphs provide a brief summary of these properties.

4137 Commerce Circle, Idaho Falls, ID The facility located on this property houses our main corporate headquarters and all of our current manufacturing operations. We hold this property pursuant to a lease that extends through April 2021. The facility was new when leased in March 2001 and remains in excellent condition. We have a purchase option and a right of first refusal on this property that allows us to purchase this property at any time for a stated amount.

Land - Lea County New Mexico In August 2011, we received land from Lea County, New Mexico, pursuant to a Project Participation Agreement whereby the land was deeded to us for no monetary consideration. In return, we committed to construct a uranium de-conversion and FEP facility on the land. In order to retain title to the property, we were to begin construction of the uranium de-conversion facility no later than December 31, 2014, and complete Phase I of the project and have hired at least 75 persons to operate the facility no later than December 31, 2015, although commercial operations need not have begun by that date. We have not met those milestones and we are currently in discussions with Lea County, New Mexico to extend the deadlines for these performance objectives. If we do not succeed in modifying the dates in the agreement then we may, at our sole option, either purchase or re-convey the property to Lea County, New Mexico. The purchase price of the property would be \$776,078, plus interest at the annual rate of 5.25% from the date of the closing to the date of payment. We have not recorded the value of this property as an asset and will not do so until such time that sufficient progress on the project has been made to meet our obligations under the agreements for permanent transfer of the title.

### **Item 3. LEGAL PROCEEDINGS**

We are not party to any material pending legal proceedings.

### **Item 4. MINE SAFETY DISCLOSURES**

Not applicable.



**PART II****Item 5.****MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

During 2014, our common stock was quoted on the OTCBB under the trading symbol INIS.OB. In February 2015 we listed our common stock on the OTCQB under the trading symbol INIS. High asked prices and low bid prices reported by the OTCBB during the periods indicated are shown below, which reflect inter-dealer prices, without retail mark-up, mark-down, or commission and may not reflect actual transactions:

<b>Fiscal Year</b>	<b>Quarter</b>	<b>High</b>	<b>Low</b>
2014	1 <sup>st</sup>	\$0.06	\$0.04
2014	2 <sup>nd</sup>	\$0.06	\$0.04
2014	3 <sup>rd</sup>	\$0.05	\$0.04
2014	4 <sup>th</sup>	\$0.05	\$0.03
2013	1 <sup>st</sup>	\$0.20	\$0.12
2013	2 <sup>nd</sup>	\$0.16	\$0.11
2013	3 <sup>rd</sup>	\$0.16	\$0.09
2013	4 <sup>th</sup>	\$0.11	\$0.02

As of March 2, 2015, there were 545 holders of record of our common stock. We have never paid any cash dividends on our common stock. In the future, and based upon our profit performance, our Board of Directors (the Board) will evaluate and determine whether to issue dividends or retain funds for research and development and expansion of our business. We do not anticipate paying any dividends to shareholders for the foreseeable future.

**Item 6. SELECTED FINANCIAL DATA**

We are a smaller reporting company, and therefore, are not required to provide the information required by this item.

**Item 7.**

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

*The following discussion of our results of operations and financial condition should be read in conjunction with the accompanying financial statements and related notes thereto included in Item 8, Financial Statements and Supplementary Data, within this Annual Report.*

**Overview**

We manufacture a full range of nuclear medicine calibration and reference standards, a wide range of products including cobalt teletherapy sources, and a varied selection of radioisotopes and radiochemicals for medical research, and clinical devices. We also provide a host of transportation, recycling, and processing services on a contract basis for clients. A more detailed description of each of these product lines and services along with a description of our segments, can be found in Item 1, Business under General Business and Products Description, within this Annual Report.

In 2014, we pursued research and development of new products and services in three of our business segments. We also continued to make investments in our facility to improve upon manufacturing processes, and entered into new agreements that we believe will increase future revenues. The following are highlights of some of our significant accomplishments in 2014:

In April 2014, we began sales of a new lightweight flood source, that we developed in collaboration with RadQual;

We participated in the redesign of a new cobalt production target and completed successful contract negotiations with the DOE allowing us to enter into a ten year agreement for cobalt production in the Advanced Test Reactor located in Idaho;

We have expanded our customer base for radiochemical products including the addition of a new exclusive supply agreement with a customer that should begin to take effect in 2015;

We commissioned our new mobile hot cell and were awarded several radiological services jobs through the DOE's Orphan Source Recovery Program ( OSRP );

Increased sales revenue in three of our business segments resulting in an overall 10% improvement in revenue compared to the prior year; and

We continued to reduce our overall operational expenses in comparison to the prior year.

### **Business Strategy and Core Philosophies**

Broadly defined, our business strategy is to continue to build our reputation as a leader in the cobalt, radiochemical, field services, and nuclear medicine product industries, as well as seek ways to improve our customer service and expand our market share, with the ultimate goal of providing greater return to our shareholders. Specifically, we are continuously working with our customers to improve and develop products to better serve the needs of the end user which, ultimately, will boost product sales. A key part of our near- and long-range business strategies is to develop and market new products in our core business segments that will offer customers a high quality and desirable product as well as increase our revenues, secure customer contracts, and pursue financial support so that we can resume work on building the nation's first commercial depleted uranium de-conversion and fluorine extraction processing facility.

Our core philosophy is to strive to provide high quality products and services as a profitable and environmentally conscious business, while offering excellent customer service and providing a safe and high quality working environment for our employees. We operate in accordance with an ISO Quality Management System and in accordance with all current Good Manufacturing Practices (cGMP) under which we seek to maintain the highest level of quality and continuously improve our product manufacturing processes.

## Results of Operations

Summary for 2014:

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Revenue in 2014 was approximately \$7.5 million;

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Net loss for 2014 decreased by approximately 37% compared to 2013;

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Our total gross profit rate increased from 37% in 2013 to 40% in 2014; and

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Our operating costs for 2014 decreased approximately 19% as compared to operating costs for 2013.





**Year Ended December 31, 2014 Compared to Year Ended December 31, 2013**

The following table presents comparative Revenues for the years 2014 and 2013:

	<b>For the year ended December 31, 2014</b>	<b>For the year ended December 31, 2013</b>	<b>\$ change</b>	<b>% change</b>
<b>Revenues</b>				
Radiochemical Products	\$ 1,742,495	\$ 1,636,535	\$ 105,960	6%
Cobalt Products	1,791,906	1,080,011	711,895	66%
Nuclear Medicine Standards	3,267,254	3,249,126	18,128	1%
Radiological Services	621,431	763,980	(142,549)	-19%
Fluorine Products	-	-	-	0%
Transportation	113,775	119,498	(5,723)	-5%
Total Segments	7,536,860	6,849,150	687,710	10%
Corporate revenue	-	-	-	0%
Total Consolidated	\$ 7,536,860	\$ 6,849,150	\$ 687,710	10%

**Revenues**

Total revenues in 2014 were \$7,536,860, compared to \$6,849,150 in 2013, which represents an increase of \$687,710, or approximately 10%. Three of our six business segments reported increased revenue in 2014. The details of each segment are discussed below.

	<b>For the year ended December 31, 2014</b>	<b>% of Total Revenues 2014</b>	<b>For the year ended December 31, 2013</b>	<b>% of Total Revenues 2013</b>
<b>Revenues</b>				
Radiochemical Products	\$ 1,742,495	23%	\$ 1,636,535	24%
Cobalt Products	1,791,906	24%	1,080,011	16%
Nuclear Medicine Standards	3,267,254	43%	3,249,126	47%
Radiological Services	621,431	8%	763,980	11%
Fluorine Products	-	0%	-	0%
Transportation	113,775	2%	119,498	2%
Corporate revenue	-	0%	-	0%
Total Segments	\$ 7,536,860	100%	\$ 6,849,150	100%

Radiochemical Products

Sales of radiochemical products accounted for approximately 23% of our total sales revenue in 2014 and approximately 24% of total sales revenue in 2013. Sales in this segment increased by \$105,960, or approximately 6% to \$1,742,495, as compared to \$1,636,535 in 2013. The increase was primarily due to increased sales of sodium iodide in 2014. In prior years, and up through August 2014, we utilized RadQual as a distributor of our sodium iodide product, which was then sold to their customers. Beginning in September 2014, through mutual agreement with RadQual, we became the direct distributor of 100% of our sodium iodide products. This change was based on RadQual's desire to focus more heavily on its core business of reference sources and nuclear imaging and our objective to improve the margins realized on radiochemical sales. We continue to maintain an excellent relationship with RadQual, and will continue to be its sole source manufacturer of nuclear medicine products. We are currently working on further enhancements of existing products within this segment and are evaluating the possible addition of several new products. We intend to continue selling our products directly to our radiochemical customers since we believe this will strengthen our customer relationships and further improve our market position for current and future products.

### Cobalt Products

Total cobalt products sales accounted for approximately 24% of our total sales revenue in 2014 and approximately 16% of total sales revenue in 2013. Sales in this segment increased by \$711,895 in 2014 to \$1,791,906, as compared to \$1,080,011 in 2013. The increase was primarily due to increased sealed source cobalt sales in 2014.

Our sealed source manufacturing generates the majority of our revenue in this segment and these sealed source sales depend on our ability to produce or procure cobalt target material from the DOE's ATR. Although for over a year we had not been able to obtain sufficient high specific activity material from the reactor to meet our customer demands, in the fourth quarter of 2013, we were able to resume shipments of a limited amount of cobalt that had been previously irradiated in the ATR to our Idaho Falls facility and to manufacture sealed source products from that material. The bulk of this material was sold during the first quarter of 2014, however, some sales continued through December 31, 2014. Also during 2014, we were able to obtain some additional high activity cobalt through third party suppliers.

In October 2014, we entered into a ten year agreement with the DOE for the irradiation of a new design of cobalt target. It takes approximately two to three years to irradiate the cobalt targets to the desired level of activity and we anticipate having high specific activity cobalt available to our customers by about the middle of 2017 and every year thereafter through at least 2024. The agreement gives us the ability to purchase the current full capacity of the DOE's ATR reactor throughout the ten year period provided we make timely contract payments and maintain proper licensing. Further, the contract could be terminated if the DOE determines that such action would be necessary for the national defense, security or environmental safety of the United States. We will also continue to work with alternate cobalt suppliers to obtain material in the interim period to meet future shorter term customer needs.

As of December 2014, we continued to hold many in-progress old design cobalt targets at the ATR. The DOE suspended continued irradiation of those targets in 2013 pending further engineering analysis; however, during 2014 we funded a report that has defined the specific engineering analyses that must be completed to resume irradiation of these old design targets. Our current options are to 1) fund the engineering analysis to resume irradiation, 2) sell the existing inventory to the DOE and have the DOE fund the engineering analysis, or 3) salvage the old target inventory for whatever value could be obtained at its present activity level. During 2015, we will continue to weigh these options with regard to their future use in cobalt product production. In the meantime we will continue to carry the historical irradiation costs of these targets in our inventory.

### Nuclear Medicine Standards

Sales of nuclear medicine standards accounted for approximately 43% and 47%, of our total sales revenue in 2014 and 2013, respectively. Sales in this segment increased by \$18,128, or approximately 1%, to \$3,267,254 in 2014, as compared to \$3,249,126 in 2013. This year-to-year comparison includes sales from TI Services, a 50/50 joint venture that we formed with RadQual in December 2010, to distribute products and services for nuclear medicine, nuclear cardiology and Positron Emission Tomography ( PET ) imaging. The following table presents 2014 and 2013 sales for

the nuclear medicine standards segment:

	For the year ended December 31, 2014	For the year ended December 31, 2013	\$ change	% change
<b><u>Nuclear Medicine Standards</u></b>				
Source Sales	\$ 1,949,172	\$ 1,732,086	\$ 217,085	13%
TI Services LLC	1,318,082	1,517,040	-198,958	-13%
	\$ 3,267,254	\$ 3,249,126	\$ 18,128	1%

TI Services sales for 2014 were \$1,318,082 as compared to \$1,517,040 for 2013, a decrease of \$198,958, or approximately 13%. This decrease in TI Services sales is largely attributable to a drop in sales of paper products used in nuclear medicine imaging, which is the result of clinics shifting towards maintaining electronic records. We have been working closely with RadQual, our partner in the TI Services joint venture, to develop and market new products through TI Services. As a result of this collaboration, in April 2014, we launched sales of a new lightweight flood source, the Rad-Lite. We are marketing this product through TI Services and other distributors. Sales of flood sources increased to \$1,949,172 in 2014, from \$1,732,086, in 2013. This is an increase of \$217,085, or approximately 13%. This increase was the result of the introduction and sales of our new lightweight flood source which has allowed us to capture additional market share from our competitor.

### Radiological Services

Revenues from our Radiological Services segment accounted for approximately 8% of our total sales revenue in 2014, and approximately 11% in 2013. Sales in this segment decreased by \$142,549, or approximately 19%, from \$763,980 in 2013, to \$621,431 in 2014. Gemstone processing accounted for approximately 34% of Radiological Services sales in 2014 and approximately 40% in 2013. Revenues from gemstone processing decreased by \$93,997, from \$308,101 in 2013, to \$214,103 in 2014. This is a decrease of approximately 31% and was the result of a decline in the volume of material shipped to us for processing, and the continuous fluctuations in demand for luxury items such as jewelry.

Radiological Field Services accounted for approximately 66% of the Radiological Services segment sales in 2014 and approximately 60% in 2013. Radiological Field Services revenue decreased from \$455,879 in 2013, to \$407,328 in 2014 which is a decrease of approximately 11%. The decline in field services is largely the result of the timing of OSRP contractual work which can fluctuate significantly from period to period. We anticipate additional work under this program in 2015. In addition, in December 2013, we entered into a support services agreement with one customer to perform field service work related to source design and installation. There was some design work performed under this agreement during 2014 and we anticipate the source installation work to begin during the latter half of 2015. Based upon the current and anticipated contract commitments for this type of work we expect that field services will continue to be the primary source of revenue within this segment in 2015.

The following table presents radiological services revenue for the two years ended December 31, 2014 and 2013:

	<b>For the year ended December 31, 2014</b>	<b>For the year ended December 31, 2013</b>	<b>\$ change</b>
<b><u>Radiological Services</u></b>			
Gemstone Processing	\$ 214,103	\$ 308,101	\$ -93,997
Radiological Field Services	407,328	455,879	-48,551
	\$ 621,431	\$ 763,980	\$ -142,549

Fluorine Products

There were no revenues to report from the Fluorine Products segment for 2014. We have been developing our fluorine products in conjunction with uranium de-conversion, in order to take advantage of the anticipated need for depleted uranium de-conversion services. We established the Fluorine Products segment in 2004 to support production and sale of the gases produced using our FEP process. From 2004 to 2012, we used our pilot facility to develop production processes for various high-purity products and to test methods of scaling up the size of production operations in support of the planned de-conversion facility in New Mexico. In 2012, we completed our testing of individual components and analytical processes and in 2013 we closed the pilot plant facility. Also, in 2013, we made the decision to place continued formal design work on the proposed de-conversion facility on hold until such time that we are able to secure additional de-conversion services contracts and, therefore, have limited our current expenditures to just essential items such as the NRC licensing and continued interactions with our customers, the state of New Mexico, and Lea County, New Mexico.

Our FEP patents offer a unique opportunity to provide certain high-purity fluoride compounds while also offering a for fee de-conversion service to the uranium enrichment industry. During 2014, we incurred \$418,887 of planning and other expenses related to the de-conversion project, as compared to \$819,848 in 2013. This decrease of approximately \$400,961 was the result of our scaling back development efforts due to decreased funding available for the project. We will limit our future expenditures to essential items such as the NRC licensing and continued interactions with our customers, the state of New Mexico, and Lea County, New Mexico.

### Transportation

Revenues from our Transportation segment accounted for approximately 2% of our total revenues in 2014 and 2013. Sales in this segment decreased by approximately 5% to \$113,775 in 2014, as compared to \$119,498 in 2013. This decline in revenue was attributable to reduced opportunities for transportation of our cobalt products and third-party transportation contracting during the period. We primarily use our transportation services to support the transport of cobalt products and offer transportation in conjunction with field services work. There are numerous regulations that apply to, and agencies which monitor, the security and tracking of cobalt shipments and our Transportation segment specializes in the transport of hazardous, radioactive materials, including large cobalt shipments.

### *Cost of Revenues and Gross Profit*

Cost of revenue for 2014 was \$4,559,745, as compared to \$4,313,543 in 2013, an increase of \$246,202 or approximately 6%. Gross profit percentage increased to 40% for 2014, from 37% in 2013. The following table presents revenues and cost of revenues information:

	<b>For the year</b>		<b>For the year</b>	
	<b>ended</b>	<b>% of</b>	<b>ended</b>	<b>% of</b>
	<b>December 31,</b>	<b>Total Revenues</b>	<b>December 31,</b>	<b>Total</b>
	<b>2014</b>	<b>2014</b>	<b>2013</b>	<b>Revenues</b>
				<b>2013</b>
Total Revenues	\$ 7,536,860		\$ 6,849,150	
Cost of Revenues				
Radiochemical Products	\$ 1,266,246	17%	\$ 1,249,358	18%
Cobalt Products	802,059	11%	707,185	10%
Nuclear Medicine Standards	2,135,507	28%	2,131,032	31%
Radiological Services	345,010	5%	200,173	3%
Fluorine Products	-	-	-	-
Transportation	10,923	0%	25,795	0%
Total Segments	\$ 4,559,745	61%	\$ 4,313,543	63%

Gross Profit	\$	2,977,115	\$	2,535,607
Gross Profit %		40%		37%

During 2014 we continued to monitor and control direct costs. We were able to cut some freight costs by using our own transportation vehicles for some higher cost, cross-country shipments of material. We also became the direct distributor of all of our sodium iodide products. With the exception of the cost of cobalt material, we are not aware of any future price increases that may potentially affect our cost of revenues.

***Operating Costs and Expenses***

Total operating costs and expenses for 2014 were \$3,762,999, as compared to \$4,633,860 in 2013; this is a decrease of \$870,861, or approximately 19%.



The following table presents Operating Costs and Expenses for 2014 as compared to 2013:

	<b>For the year</b>	<b>For the year</b>	
	<b>Ended</b>	<b>Ended</b>	
	<b>December 31,</b>	<b>December 31,</b>	<b>% change</b>
	<b>2014</b>	<b>2013</b>	
Operating Costs and Expenses:			
Salaries and Contract Labor	\$ 1,690,034	\$ 1,801,433	-6%
General, Administrative and Consulting	1,608,759	2,126,379	-24%
Research and Development	464,206	706,048	-34%
Total operating expenses	\$ 3,762,999	\$ 4,633,860	-19%

Salaries and Contract Labor decreased 6% in 2014, as compared to 2013. Salaries and Contract Labor included approximately \$244,000 in non-cash equity-based compensation in 2014, as compared to approximately \$349,000 in 2013. The decrease of approximately \$105,000 was the result of our recording non-cash equity based compensation expense in 2013 from the modification to the terms of several classes of warrants; we had no such warrant modification in 2014. Non-cash equity based compensation recorded for 2014 was the result of stock options outstanding including a re-pricing of an aggregate of 14,500,000 outstanding options held by executive officers and members of the Board, as well as equity compensation recorded for 11,500,000 incentive and non-qualified stock options granted in October 2014.

General Administrative and Consulting expenses decreased 24% to \$1,608,759 in 2014, as compared to \$2,126,379 in 2013. This decrease is primarily the result of an adjustment to accretion expense and a loss on the sale of assets in 2013. General, Administrative and Consulting expense in 2014 includes an adjustment to accretion expense in the amount of \$84,527 which decreased the expense recorded for the year. This adjustment was the result of a periodic review of funding for decommissioning, as required by the NRC. At the time of the review, it was determined that we had accrued excess lease obligation expense that we report as a long-term liability on our balance sheet. The liability was reduced and recorded against our capitalized lease obligation and accretion expense. During 2013 we recorded a net loss on sale of long lived assets in the amount of \$307,402 as the result of closing down our pilot plant facility in Idaho Falls, ID. We recorded no such loss in 2014.

Research and development expense was \$464,206 for 2014 as compared to \$706,048 for 2013. This is a decrease of \$241,842, or approximately 34%. The majority of this decrease in research and development expense is the result of limiting investment in the planned de-conversion facility. During both 2014 and 2013, funding for this project was limited; consequently, we limited additional investment in the project to expenses necessary to maintain licensing and continued interactions with New Mexico and Lea County. We will continue to delay further engineering work on the de-conversion project until we are able to secure additional contracts for de-conversion services.

***Other Income (Expense)***

Other Income (Expense) in 2014 was (\$753,347) compared to (\$387,309) in 2013.

	<b>For the year ended December 31, 2014</b>	<b>For the year ended December 31, 2013</b>
Other income (expense)	\$ 86,534	\$ 22,929
Equity in net income of affiliate	96,058	57,650
Interest income	586	1,147
Interest expense	(936,525)	(469,035)
Total other (expense)	\$ (753,347)	\$ (387,309)

Other income was \$86,534 for 2014 as compared to other income of \$22,929 for 2013. During 2014 we sold equipment for \$50,000 which was recorded as other income. This equipment had previously been scrapped and written off in 2012.

Equity in net income of affiliate reflects the Company's 24.5% share of net income reported by RadQual. Interest income in 2014 was \$586, as compared to \$1,147 in 2013. This slight decrease of \$561 was due to decreased funds held at banks and other institutions in interest-bearing accounts.

Interest expense increased significantly during 2014, from \$469,035 in 2013, to \$936,525 in 2014. This is an increase of \$467,490, or approximately 100%. Approximately \$735,000 of the interest expense recorded in 2014 represents non-cash interest expense recorded as the result of various debt securities transactions in 2012 and 2013. In July 2012, we entered into a securities purchase agreement with certain institutional and private investors to sell convertible debentures for proceeds of \$3,069,900. These debentures bear interest at 8% per year and mature in July 2017. As a result of this agreement, we recorded approximately \$160,000 in non-cash interest expense during 2014. In February 2013, we entered into a securities purchase agreement and sold convertible debentures for proceeds of \$1,060,000.

These debentures accrue interest at a rate of 10% per year, compounded annually, and matured in February 2015. As a result of this financing activity, we recorded approximately \$154,000 of non-cash interest expense during 2014. In December 2013, we borrowed \$500,000 from our Chairman of the Board and one of our major shareholders. The note bears interest at 6% and was originally due June 30, 2014. This note was re-negotiated in June 2014 and the maturity date was extended to December 31, 2017. In connection with this note payable, we recorded approximately \$421,000 of non-cash interest as part of a debt discount feature.

### ***Net Loss***

Our Net Loss was \$1,545,077 in 2014, compared to a Net Loss of \$2,461,845 in 2013. This is a decrease in loss of \$916,768, or approximately 37%. Our decrease in net loss is the result of increased revenue in three of our six business segments and the decrease in overall operating expenses. During 2013 we recorded \$307,402 in net loss on sales of assets sold or scrapped as a result of closing our FEP pilot facility in Idaho Falls, ID, and recorded \$193,982 in inventory write-off expense related to older, low-activity cobalt targets which we determined to have impaired market value due to their age and physical condition. We did not record similar expenses in 2014.

### ***Liquidity and Capital Resources***

On December 31, 2014, we had cash and cash equivalents of \$558,541 compared to \$456,374 at December 31, 2013. Net cash provided by operating activities was \$339,808 in 2014, compared to net cash used in operating activities of \$1,393,898 in 2013. This represents an increase in net cash from operating activities of \$1,733,706 in the period comparison.

Accounts receivable at December 31, 2014 were \$783,937 as compared to \$1,046,403 at December 31, 2013. Historically, we have not written off any accounts receivable and there were no accounts receivable written off during 2014.

Inventories at December 31, 2014 were \$1,049,106 as compared to \$1,478,349 at December 31, 2013. The majority of our inventory consists of irradiated material held at the site of the DOE's prime-operating contractor, which controls the Idaho test reactor. For 2014 our target inventory accounted for approximately 73% of our work in process inventory and during 2013 our target inventory accounted for approximately 79% of our work in process inventory. We are currently in discussions with the DOE regarding future options for these targets. We believe the targets have significant but varying degrees market value depending on whether or not further irradiation will or will not occur. We anticipate that the decision regarding the future of these targets is likely to be made during 2015.

We incurred a loss of \$1,545,077 for the year ended December 31, 2014, and have an accumulated deficit of \$118,242,224 since inception. To date, our operations and plant and equipment expenditures have been funded principally from proceeds from public and private sales of debt and equity as well as through asset sales.

Net cash used in investing activities was \$39,800 for 2014. During 2014, we used \$115,388 to purchase property and equipment and intangible assets and we received member distributions from our investment in RadQual, in the amount of \$96,681. During 2013, net cash used in investing activities was \$480,458. During 2013, we used \$572,101 to purchase property, equipment and intangible assets. And, in 2013, we received member distributions from RadQual in the amount of \$82,708.

Financing activities used cash of \$197,841 for the year ended December 31, 2014. We received proceeds from the sale of stock in the amount of \$8,417 during 2014 and made principal payments on loans in the amount of \$206,258. During 2013, financing activities provided cash of \$1,784,587 from the issuance of convertible debentures, the issuance of a note payable and from the sale of stock. During 2013, we made principal payments on loans in the amount of \$236,362.

On July 27, 2012, we entered into a securities purchase agreement with certain institutional and private investors pursuant to which we sold convertible debentures for an aggregate of \$3,069,900. The debentures bear interest at 8%, mature in July 2017 and are unsecured. These debentures are convertible at any time into shares of our common stock at an initial conversion price of \$0.225 per share, subject to adjustment in certain conditions. Under certain conditions, we may force the conversion of the debentures. The Company also held the right, prior to the second anniversary of the closing date, to redeem all or part of the debentures if the Company successfully consummated a financing of the proposed Lea County, New Mexico de-conversion facility in the amount of at least \$25 million. This financing was not obtained and the Company did not redeem the debentures. In addition, from and after the second anniversary of the closing date, we have the right to redeem all or part of the debentures at any time prior to their maturity date. Any redemption of the debentures by us requires the payment of a redemption fee as set forth in the debentures. In this transaction, each investor also received a common stock purchase warrant to purchase such number of shares of our common stock equal to twenty five percent (25%) of the number of shares of common stock that the note purchased by such investor was convertible into on the closing date. The total number of warrants issued was 4,502,520. The warrants are immediately exercisable at a price of \$0.30 per share and have a term of five years.

On February 20, 2013, we entered into a securities purchase agreement with certain private investors pursuant to which we sold convertible debentures for an aggregate of \$1,060,000. The debentures accrue interest at a rate of 10% per annum, compounded annually, and matured February 20, 2015. The conversion price in effect for these debentures, on any conversion date, is equal to the lesser of \$0.14 or the average closing price of our common stock for the 120 consecutive trading days up to, but not including, the maturity date. On February 20, 2015, all of the outstanding principal of the debentures as well as the accrued interest of \$222,600, were converted into 32,065,000 shares of common stock at a conversion price of \$0.04 per share.

In April 2013, we negotiated with the NRC to convert amounts owing as a trade payable into a long-term note. We converted a total of \$596,816 to the note payable which is payable in monthly installments of \$17,500 and accrues interest at a rate of 1% annually. The note matures in March 2016 and is unsecured.

In December 2013, we entered into a promissory note agreement with our Chairman of the Board and one of our major shareholders pursuant to which we borrowed \$500,000. The \$500,000 note bears interest at 6% and was originally due June 30, 2014. At any time, the lenders may settle any or all of the principal and accrued interest with shares of the Company's common stock. In connection with the note, each of the two lenders was issued 5,000,000 warrants to purchase shares of the Company's common stock at a purchase price of \$0.06 per share. In June 2014, we renegotiated the terms of this promissory note. Pursuant to the modification, the maturity date was extended to December 31, 2017, and each Lender was granted an additional 7,500,000 warrants to purchase shares of the Company's common stock at \$0.06 per share. The warrants were immediately exercisable.

On October 27, 2014, the Compensation Committee of our Board of Directors approved the re-pricing of an aggregate of 14,500,000 outstanding stock options held by executive officers and members of the Board, which had original exercise prices of either \$0.07 or \$0.08 per share. The Compensation Committee lowered the exercise price per share to \$0.035 for each option, which was the fair market value of the Company's stock on October 27, 2014.

In addition, on October 27, 2014, the Compensation Committee granted an aggregate of 8,100,000 incentive stock options to executive officers and employees with an exercise price of \$0.035 per share. Also, the Compensation Committee granted 400,000 nonqualified stock options to consultants and 3,000,000 nonqualified stock options to members of the Board. All of the stock options were granted with an exercise price of \$0.035 per share, vest over a period of two years, and expire on October 27, 2024.

We expect that cash from operations, cash obtained through securities offerings, and our current cash balance will be sufficient to fund operations for the next twelve months. Although we may seek additional debt financing for our projects and operations in the future, there is no assurance that we will be able to secure additional debt financing on acceptable terms to us, or at all.

### **Off-Balance Sheet Arrangements**

As of December 31, 2014 and 2013, we had no off-balance sheet arrangements or obligations.

### **New Accounting Standards**

In May 2014, the FASB issued authoritative guidance for revenue and contracts with customers. The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve that core principle, an entity should apply the following steps:

Step 1: Identify the contract(s) with a customer.

Step 2: Identify the performance obligations in the contract.

Step 3: Determine the transaction price.

Step 4: Allocate the transaction price to the performance obligations in the contract.

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation.

An entity should disclose sufficient information to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Qualitative and quantitative information is required about:

1. Contracts with customers-including revenue and impairments recognized, disaggregation of revenue, and information about contract balances.
  
2. Significant judgments and changes in judgments-determining the timing of satisfaction of performance obligations (over time or at a point in time), and determining the transaction price and amounts allocated to performance obligations.
  
3. Assets recognized from the costs to obtain or fulfill a contract.

For public entities, the amendments in this Update are effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. Early adoption is not permitted. The Company has not yet determined what effect this standard will have on its results of operations.



In June 2014, the FASB issued authoritative guidance for stock based compensation. The amendments require that a performance target that affects vesting and that could be achieved after the requisite service period be treated as a performance condition. A reporting entity should apply existing guidance as it relates to awards with performance conditions that affect vesting to account for such awards. As such, the performance target should not be reflected in estimating the grant-date fair value of the award. Compensation cost should be recognized in the period in which it becomes probable that the performance target will be achieved and should represent the compensation cost attributable to the period(s) for which the requisite service has already been rendered. If the performance target becomes probable of being achieved before the end of the requisite service period, the remaining unrecognized compensation cost should be recognized prospectively over the remaining requisite service period. The total amount of compensation cost recognized during and after the requisite service period should reflect the number of awards that are expected to vest and should be adjusted to reflect those awards that ultimately vest. The requisite service period ends when the employee can cease rendering service and still be eligible to vest in the award if the performance target is achieved. As indicated in the definition of vest, the stated vesting period (which includes the period in which the performance target could be achieved) may differ from the requisite service period. The amendments in this Update are effective for annual periods and interim periods within those annual periods beginning after December 15, 2015. Earlier adoption is permitted. We have not yet determined what effect this standard will have on our results of operations.

## **Outlook for 2015**

Based upon the investments we have made in our facilities, projects, and products developed in 2014, we have the following goals for 2015:

·  
Pursue additional field services work through both the DOE's OSRP program and other domestic or international programs and utilizing our mobile hot cell;

·  
Enter into several long term cobalt supply contracts with customers for the purchase of cobalt material being produced under the terms of the new ten year contract completed with the DOE in October 2014;

·  
Continue to identify alternate sources of cobalt-60 material for customers to reduce any shortages in supply before 2017;

Continue to research new opportunities to expand the sale of radiochemical products through joint development agreements and submittal of new generic drug product applications through the FDA;

Expand sales of our nuclear medicine products and increase cash flow by expanding international sales and improving the profitability of our joint venture, TI Services, LLC;

Continue to expand our customer base, increase revenues in every business segment, continue to reduce production and operating costs, and attempt to achieve profitability in our core business segment operations; and

Continue to support essential tasks related to our de-conversion project and continue to pursue any opportunities to obtain additional contracts for depleted uranium de-conversion.

**Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

We are a smaller reporting company, and therefore, are not required to provide the information required by this item.

**Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

The following financial statements are included herewith and are hereby incorporated by reference:

Index to Consolidated Financial Statements

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**Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

None.

**Item 9A. CONTROLS AND PROCEDURES**

**Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) that are designed to ensure information required to be disclosed in our reports that are filed or submitted under the Exchange Act, is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is accumulated and communicated to our management, including our principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management, with the participation of our Chief Executive Officer ( CEO ) and Chief Financial Officer ( CFO ), has evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2014. Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of December 31, 2014.

### **Management's Annual Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process to provide reasonable assurance regarding the reliability of our financial reporting for external purposes in accordance with accounting principles generally accepted in the United States of America. Internal control over financial reporting includes maintaining records that in reasonable detail accurately and fairly reflect our transactions; providing reasonable assurance that transactions are recorded as necessary for preparation of our financial statements; providing reasonable assurance that receipts and expenditures are made in accordance with management authorization; and providing reasonable assurance that unauthorized acquisition, use or disposition of company assets that could have a material effect on our financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting is not intended to provide absolute assurance that a misstatement of our financial statements would be prevented or detected.

Management conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework and criteria established in *Internal Control – Integrated Framework (1992)*, issued by the Committee of Sponsoring Organizations of the Treadway Commission. This evaluation included review of the documentation of controls, evaluation of the design effectiveness of controls, testing of the operating effectiveness of controls and a conclusion on this evaluation. Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2014.

### **Changes in Internal Control over Financial Reporting**

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2014, that have materially affected, or are reasonable likely to materially affect, our internal control over financial reporting.

### **Item 9B. OTHER INFORMATION**

None.

## **PART III.**

### **Item 10. DIRECTORS, EXECUTIVE OFFICERS, AND CORPORATE GOVERNANCE**

We have adopted a Code of Ethics that applies to our principal executive officer, principal financial officer, principal accounting officer and controller, or persons performing similar functions. Our Code of Ethics is posted on our website and can be accessed, free of charge, at <http://www.internationalisotopes.com>. If we waive, or implicitly waive, any material provision of the Code of Ethics that apply to our executive officers, or substantively amend the Code of Ethics, in each case that is required to be disclosed, we will disclose that fact on our website.

The other information required by this item is incorporated by reference in our definitive proxy statement for our 2015 annual meeting of shareholders, which will be filed with the SEC within 120 days after December 31, 2014.

**Item 11. EXECUTIVE COMPENSATION**

The information required by this item is incorporated by reference to our definitive proxy statement for our 2015 annual meeting of shareholders, which will be filed with the SEC within 120 days after December 31, 2014.

**Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS**

The information required by this item is incorporated by reference to our definitive proxy statement for our 2015 annual meeting of shareholders, which will be filed with the SEC within 120 days after December 31, 2014.

**Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

The information required by this item is incorporated by reference to our definitive proxy statement for our 2015 annual meeting of shareholders, which will be filed with the SEC within 120 days after December 31, 2014.

**Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES**

The information required by this item is incorporated by reference to our definitive proxy statement for our 2015 annual meeting of shareholders, which will be filed with the SEC within 120 days after December 31, 2014.



**Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES**

*(a)(1) and (a)(2) Financial Statements*

See the index to and the financial statements beginning on page 36, which financial statements are incorporated herein by reference.

*(a)(3) Exhibits*

The following documents are filed or incorporated herein by reference as exhibits to this report:

2.1

Securities Purchase Agreement, dated July 27, 2012, among the Company, the purchasers named therein and Euro Pacific Capital, Inc. (incorporated by reference to Exhibit 99.1 of the Company's Current Report on Form 8-K filed on August 2, 2012).

2.2

Securities Purchase Agreement, dated February 20, 2013, among the Company and the purchasers named therein (incorporated by reference to Exhibit 2.1 of the Company's Current Report on Form 8-K filed on February 26, 2013).

3.1

Restated Certificate of Formation of the Company, as amended (incorporated by reference to Exhibit 3.1 of the Company's Quarterly Report on Form 10-Q for quarter ended June 30, 2010).

3.2

Bylaws of the Company (incorporated by reference to Exhibit 3.2 of the Company's Registration Statement on Form SB-2 filed on May 1, 1997 (Registration No. 333-26269)).

4.1

Form of 8% Convertible Note (incorporated by reference to Exhibit 99.2 of the Company's Current Report on Form 8-K filed on August 2, 2012).

4.2



Form of Class K Warrant (incorporated by reference to Exhibit 99.3 of the Company's Current Report on Form 8-K filed on August 2, 2012).

4.3

Form of Convertible Debenture (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on February 26, 2013).

4.4

Form of Class L Warrant (incorporated by reference to Exhibit 4.10 of the Company's Annual Report on Form 10-K for the year ended December 31, 2013).

10.1

International Isotopes Inc. 2002 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 of the Company's Annual Report on Form 10-KSB for the year ended December 31, 2002).

10.2

Form of Incentive Stock Option Agreement under the International Isotopes Inc. 2002 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2 of the Company's Annual Report on Form 10-KSB for the year ended December 31, 2004).

10.3

International Isotopes Inc. Employee Stock Purchase Plan (incorporated by reference to Appendix B to the Company's definitive proxy statement on Schedule 14A, as amended, filed on May 6, 2005).

10.4

Lease Agreement (4137 Commerce Circle), dated May 1, 2011, between the Company and Adrian Rand Robison and Dorothy Robison (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2011).

10.5

Option to Purchase and Right of First Refusal (4137 Commerce Circle), dated May 2, 2003 between the Company and Adrian Rand Robison and Dorothy Robison (incorporated by reference to Exhibit 10.7 of the Company's Annual Report on Form 10-KSB for the year ended December 31, 2004).

10.6

International Isotopes Inc. 2006 Equity Incentive Plan (incorporated by reference to Annex A of the Company's definitive proxy statement on Schedule 14A filed on May 1, 2006).

10.7

Alpha-Omega Services, Inc. Distributor Agreement, dated August 14, 2007, between the Company and Alpha-Omega Services, Inc. (incorporated by reference to Exhibit 99.1 of the Company's Current Report of Form 8-K filed on August 22, 2007).

10.8

Form of Director and Officer Indemnification Agreement (incorporated by reference to Exhibit 99.1 of the Company's Current Report on Form 8-K filed on September 17, 2008).

10.9

Memorandum of Agreement, dated October 22, 2009, between the Company and the New Mexico Environment Department (incorporated by reference to Exhibit 99.1 of the Company's Current Report on Form 8-K filed on October 27, 2009).

10.10

Gemstone Processing Agreement between the Company and Quali-Tech, Inc. (incorporated by reference to Exhibit 10.1 of Amendment No. 1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009 filed on September 24, 2009).

10.11

Manufacturing Agreement, dated January 30, 2006, between the Company and RadQual, LLC (incorporated by reference to Exhibit 10.2 of Amendment No. 1 to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2009 filed on September 24, 2009).

10.12

Sales Agreement, effective August 1, 2010, between International Isotopes Idaho, Inc. and NTP Radioisotopes (Pty) Ltd. (incorporated by reference to Exhibit 10.3 of the Company's Quarterly Report on Form 10-Q for period ended June 30, 2010).\*\*

10.13

Registration Rights Agreement, dated October 29, 2010, among the Company and certain investors party thereto (incorporated by reference to Exhibit 99.2 of the Company's Current Report on Form 8-K filed on November 1, 2010).

10.14

Registration Rights Agreement, dated July 27, 2012, among the Company and the purchasers named therein (incorporated by reference to Exhibit 99.4 of the Company's Current Report on Form 8-K filed on August 2, 2012).

10.15

Amended and Restated Employment Agreement, dated May 16, 2012, between the Company and Stephen Laflin (incorporated by reference to Exhibit 10.2 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2012).

10.16

Promissory Note Agreement, dated December 23, 2013, among the Company, Ralph Richart and John McCormack (incorporated by reference to Exhibit 10.19 of the Company's Annual Report on Form 10-K for the year ended December 31, 2014).

10.17

Modification #1 to the Promissory Note Agreement, dated June 30, 2014, among the Company, Ralph M. Richart and John M. McCormack (incorporated by reference to Exhibit 10.1 of the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2014).

10.18+

Isotope and Technical Service Order Form, dated October 2, 2014, between the Company and the U.S. Department of Energy. \*\*

21.1

Subsidiaries (incorporated by reference to Exhibit 21 of the Company's Annual Report on Form 10-KSB for the year ended December 31, 2005).

23.1+

Consent of Eide Bailly LLP.

31.1+

Certification of Chief Executive Officer under section 302 of the Sarbanes-Oxley Act of 2002.

31.2+

Certification of Chief Financial Officer under section 302 of the Sarbanes-Oxley Act of 2002.

32.1\*

Certification of Chief Executive Officer furnished under section 906 of the Sarbanes-Oxley Act of 2002.

32.2\*

Certification of Chief Financial Officer furnished under section 906 of the Sarbanes-Oxley Act of 2002.

101+

The following financial statements, formatted in XBRL: (i) Consolidated Balance Sheets as of December 31, 2014 and 2013, (ii) Consolidated Statements of Operations for the years ended December 31, 2014 and 2013, (iii) Consolidated Statement of Shareholders' Equity for the years ended December 31, 2014 and 2013, (iv) Consolidated Statements of Cash Flows for the years ended December 31, 2014 and 2013 and (v) Notes to Consolidated Financial Statements.

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This exhibit constitutes a management contract or compensatory plan or arrangement.

\*\* Contains material that has been omitted pursuant to a request for confidential treatment and such material has been filed separately with the Commission.

+ Filed herewith.

\* Furnished herewith.





Ralph Richart  
Chairman of the Board of Directors

**INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES**

**CONSOLIDATED FINANCIAL STATEMENTS**

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and

Shareholders of International Isotopes, Inc.

We have audited the accompanying consolidated balance sheets of International Isotopes, Inc. and Subsidiaries (collectively the Company) as of December 31, 2014 and 2013 and the related consolidated statements of operations, stockholders' equity, and cash flows for the years then ended. The Company's management is responsible for these financial statements. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidences supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of International Isotopes Inc. as of December 31, 2014 and 2013 and the consolidated results of its operations, and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

**Eide Bailly LLP**

Salt Lake City, Utah

March 31, 2015

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## INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES

## Consolidated Balance Sheets

Assets	December 31,	
	2014	2013
Current assets		
Cash and cash equivalents	\$ 558,541	\$ 456,374
Accounts receivable	783,937	1,046,403
Inventories (Note 4)	1,049,106	1,478,349
Prepays and other current assets	351,020	613,795
Total current assets	2,742,604	3,594,921
Long-term assets		
Restricted certificate of deposit	225,315	204,222
Property, plant and equipment, net (Note 5)	2,214,850	2,271,153
Capitalized lease disposal costs, net (Note 12)	-	90,199
Investment (Note 3)	1,368,185	1,368,808
Patents and other intangibles, net (Note 6)	4,399,183	4,478,711
Total long-term assets	8,207,533	8,413,093
Total assets	\$ 10,950,137	\$ 12,008,014
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	\$ 635,876	\$ 732,449
Accrued liabilities	702,861	610,759
Current installments of notes payable net of debt discount (Note 7)	1,262,919	341,373
Total current liabilities	2,601,656	1,684,581
Long-term liabilities		
Convertible debt net of debt discount (Note 7)	2,868,200	3,806,452
Notes payable net of current portion and debt discount (Note 7)	204,500	254,198
Obligation for lease disposal costs (Note 12)	450,630	566,369
Mandatorily redeemable convertible preferred stock (Note 9)	850,000	850,000
Total long-term liabilities	4,373,330	5,477,019
Total liabilities	6,974,986	7,161,600
Stockholders' equity (Note 9)		
Common stock, \$0.01 par value; 750,000,000 shares authorized; 369,895,032 and 369,130,899 shares issued and outstanding, respectively	3,698,950	3,691,314
Additional paid-in capital	118,444,070	117,783,738
Accumulated deficit	(118,242,224)	(116,697,147)
Equity attributable to International Isotopes Inc. stockholders	3,900,796	4,777,905

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Equity attributable to noncontrolling interest	74,355	68,509
Total equity	3,975,151	4,846,414
Total liabilities and stockholders' equity	\$ 10,950,137	\$ 12,008,014

See accompanying notes to consolidated financial statements.

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## INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES

## Consolidated Statements of Operations

	<b>Years ended December 31,</b>	
	<b>2014</b>	<b>2013</b>
Sale of product	\$ 7,536,860	\$ 6,849,150
Cost of product	4,559,745	4,313,543
Gross profit	2,977,115	2,535,607
Operating costs and expenses:		
Salaries and contract labor	1,690,034	1,801,433
General, administrative and consulting	1,608,759	2,126,379
Research and development	464,206	706,048
Total operating expenses	3,762,999	4,633,860
Operating loss	(785,884)	(2,098,253)
Other income (expense):		
Other income	86,534	22,929
Equity in net income of affiliate	96,058	57,650
Interest income	586	1,147
Interest expense	(936,525)	(469,035)
Total other (expense)	(753,347)	(387,309)
Net loss	(1,539,231)	(2,485,562)
Income/(loss) attributable to noncontrolling interest	5,846	(23,717)
Net loss attributable to International Isotopes Inc.	\$ (1,545,077)	\$ (2,461,845)
Net loss per common share - basic and diluted	\$ (0.00)	\$ (0.01)
Weighted average common shares outstanding - basic and diluted	369,334,615	365,201,905

See accompanying notes to consolidated financial statements.



## INTERNATIONAL ISOTOPE INC AND SUBSIDIARIES

## Consolidated Statement of Stockholders' Equity

Years ended December 31, 2014 and 2013

	Common Stock		Additional	Accumulated	Equity	Equity	Total
	Shares	Amount	Paid-in	Deficit	Attributable	Attributable	Equity
			Capital		to	to	
					Internat'l	Noncontrolling	
					Isotopes	Interest	
					Shareholders		
Balance December 31, 2012	360,259,221	\$ 3,602,597	\$ 116,604,260	\$ (114,235,302)	\$ 5,971,555	\$ 92,226	\$ 6,063,781
Shares issued under employee stock purchase plan	93,970	939	9,621	-	10,560	-	10,560
Shares issued for exercise of employee stock options	1,793,104	17,931	12,069	-	30,000	-	30,000
Shares issued with exercise of warrants	6,727,972	67,280	353,109	-	420,389	-	420,389
Stock grant	256,632	2,567	(2,567)	-	-	-	-
Convertible debentures beneficial conversion feature	-	-	75,715	-	75,715	-	75,715
Warrants issued with convertible debentures	-	-	383,025	-	383,025	-	383,025
Stock based compensation	-	-	348,506	-	348,506	-	348,506



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Net loss	-	-	-	(2,461,845)	(2,461,845)	(23,717)	(2,485,562)
Balance							
December 31, 2013	369,130,899	3,691,314	117,783,738	(116,697,147)	4,777,905	68,509	4,846,414
Shares issued under employee stock purchase plan	196,872	1,963	6,454	-	8,417	-	8,417
Shares issued in lieu of cash interest payments	399,401	3,994	11,982	-	15,976	-	15,976
Stock grant	167,860	1,679	(1,679)	-	-	-	-
Convertible debentures beneficial conversion feature	-	-	15,464	-	15,464	-	15,464
Warrants issued with convertible debentures	-	-	384,428	-	384,428	-	384,428
Stock based compensation	-	-	243,683	-	243,683		243,683
Net loss	-	-	-	(1,545,077)	(1,545,077)	5,846	(1,539,231)
Balance							
December 31, 2014	369,895,032	\$ 3,698,950	\$ 118,444,070	\$ (118,242,224)	\$ 3,900,796	\$ 74,355	\$ 3,975,151

See accompanying notes to consolidated financial statements.



## INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES

## Consolidated Statements of Cash Flows

	<b>Years ended December 31,</b>	
	<b>2014</b>	<b>2013</b>
Cash flows from operating activities:		
Net loss	\$ (1,539,231)	\$ (2,485,562)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Net income in equity method investment	(96,058)	(57,650)
Depreciation and amortization	263,519	415,607
Loss on disposal of property, plant and equipment	-	307,402
Accretion of obligation for lease disposal costs	(37,840)	43,131
Accretion of beneficial conversion feature	45,252	37,580
Equity based compensation	243,683	348,506
Noncash interest expense	510,470	202,228
Changes in operating assets and liabilities:		
Accounts receivable	262,466	(184,613)
Prepays and other current assets	262,775	137,622
Inventories	429,243	(193,788)
Accounts payable and accrued liabilities	(4,471)	35,639
Net cash provided by (used in) operating activities	339,808	(1,393,898)
Cash flows from investing activities:		
Restricted certificate of deposit	(21,093)	(1,045)
Dividends received from equity method investment	96,681	82,708
Proceeds from sale of property, plant and equipment	-	9,980
Purchase of property, plant and equipment	(115,388)	(572,101)
Net cash used in investing activities	(39,800)	(480,458)
Cash flows from financing activities:		
Proceeds from issuance of convertible debentures	-	1,060,000
Proceeds from issuance of debt	-	500,000
Proceeds from sale of stock	8,417	460,949
Principal payments on notes payable and capital leases	(206,258)	(236,362)
Net cash (used in) provided by financing activities	(197,841)	1,784,587
Net change in cash and cash equivalents	102,167	(89,769)
Cash and cash equivalents at beginning of year	456,374	546,143
Cash and cash equivalents at end of year	\$ 558,541	\$ 456,374
Supplemental disclosure of cash flow activities:		
Cash paid for interest	\$ 236,024	\$ 200,375
Supplemental disclosure of noncash financing and investing transactions:		

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Increase in equity and decrease in debt for the beneficial conversion feature associated with the convertible debentures	\$	15,464	\$	75,715
Increase in equity and decrease in debt for amount allocated to warrants issued with convertible debentures	\$	384,428	\$	383,025
Increase in equity for issuance of stock in lieu of interest on note	\$	15,976	\$	-
Decrease in accrued interest through warrant exercise	\$	-	\$	110,733
Increase in notes payable through conversion of NRC payable	\$	-	\$	596,816

See accompanying notes to consolidated financial statements.

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INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
FOR THE YEARS ENDED DECEMBER 31, 2014 AND 2013

NOTE 1 DESCRIPTION OF BUSINESS AND SIGNIFICANT ACCOUNTING POLICIES

Description of business

International Isotopes Inc. (the Company) was incorporated in Texas in November 1995. The accompanying consolidated financial statements are presented in conformity with accounting principles generally accepted in the United States of America (GAAP) and include all operations and balances of the Company and its wholly-owned subsidiaries, International Isotopes Idaho Inc., International Isotopes Fluorine Products, Inc., and International Isotopes Transportation Services, Inc. The consolidated financial statements also include the accounts of the Company's 50% owned joint venture, TI Services, LLC, which is located in Ohio. Intercompany balances and transactions have been eliminated in consolidation. The Company's headquarters and all operations, with the exception of TI Services, LLC, are located in Idaho Falls, Idaho.

*Nature of operations* The Company's business consists of six major business segments which include: Nuclear Medicine Standards, Cobalt Products, Radiochemical Products, Fluorine Products, Radiological Services, and Transportation.

With the exception of certain unique products, the Company's normal operating cycle is considered to be one year. Due to the time required to produce some cobalt products, the Company's operating cycle for those products is considered to be three years. All assets expected to be realized in cash or sold during the normal operating cycle of the business are classified as current assets.

*Principles of consolidation* The consolidated financial statements include the accounts of the Company, its wholly owned subsidiaries and its 50% owned joint venture, TI Services, LLC. All significant intercompany accounts and transactions have been eliminated in consolidation.

Significant accounting policies

a)

Financial instruments and cash equivalents

The carrying value of notes payable approximates fair value because they bear interest at rates which approximate market rates.

Cash and cash equivalents, totaling \$558,541 and \$456,374 at December 31, 2014 and 2013, respectively, consist of operating accounts, money market accounts, and certificates of deposit. For purposes of the consolidated statements of cash flows, the Company considers all highly-liquid financial instruments with original maturities of three months or less at date of purchase to be cash equivalents.

At December 31, 2014 and 2013, the Company had pledged certificates of deposit valued at \$225,315 and \$204,222, respectively, as security on letters of credit in the amount of \$225,315 and \$204,222. The letters of credit are required as part of the operating license agreement with the Nuclear Regulatory Commission (NRC).

b)

Accounts receivable

The Company sells products mainly to recurring customers, wherein the customer's ability to pay has previously been evaluated. The Company generally does not require collateral. The Company periodically reviews accounts receivable for amounts considered uncollectible. Allowances are provided for uncollectible accounts when deemed necessary. At December 31, 2014 and 2013, the Company recorded no allowance for uncollectible accounts.

c)

Inventories

Inventories are carried at the lower of cost or market. Cost is determined using the first in, first out method. Work in progress inventory contains product that is undergoing irradiation. This irradiation process can take up to three years to reach high specific activity (HSA) levels.

d)

Property, plant and equipment

Depreciation on property, plant and equipment is computed using the straight-line method over the estimated useful life of the asset.

Leasehold improvements are amortized over the shorter of the life of the lease or the service life of the improvements. Maintenance, repairs, and renewals that neither materially add to the value of the property nor appreciably prolong its life are charged to expense as incurred. Gains or losses on dispositions of property and equipment are included in the results of operations.

e)

Patents and other intangibles

Patents and other intangibles are amortized using the straight-line method over their estimated useful lives and are evaluated for impairment at least annually or when events or circumstances arise that indicate the existence of impairment. The Company evaluates the recoverability of identifiable intangible assets whenever events or changes in circumstances indicate that an intangible asset's carrying amount may not be recoverable. Such circumstances could include, but are not limited to (1) a significant decrease in the market value of an asset, (2) a significant adverse change in the extent or manner in which an asset is used, or (3) an accumulation of the costs significantly in excess of the amount originally expected for the acquisition of an asset. The Company measures the carrying amount of the asset against the estimated undiscounted future cash flows associated with it. Should the sum of the expected future cash flows be less than the carrying value of the asset being evaluated, an impairment loss would be recognized. The impairment loss would be calculated as the amount by which the carrying value of the asset exceeds its fair value. The evaluation of asset impairment requires the Company to make assumptions about future cash flows over the life of the asset being evaluated. These assumptions require significant judgment and actual results may differ from assumed and estimated amounts. During the years ended December 31, 2014 and 2013, the Company had no impairment losses related to intangible assets.



f)

#### Impairment of long-lived assets

Long-lived assets are reviewed for impairment annually, or when events or circumstances arise that indicate the existence of impairment, using the same evaluation process as described above for patents and other intangibles. Based on the evaluation, assets that had previously been used in the FEP pilot plant testing process were determined to have no future value when the pilot plant was closed in 2013. These assets had a carrying value of approximately \$307,000 and were recorded as scrap expense during the year ended December 31, 2013. There was no impairment recorded during the year ended December 31, 2014.

g)

#### Income taxes

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry-forwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rate is recognized in income in the period that includes the enactment date.

h)

#### Use of estimates

Management of the Company has made a number of estimates and assumptions relating to the reporting of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and reported amounts of revenues and expenses during the reporting period to prepare these consolidated financial statements in conformity with GAAP. Actual results could differ from those estimates.

i)

#### Revenue recognition

Revenue is recognized when products are shipped. No warranty coverage or right of return provisions are provided to customers. During the fiscal year ending December 31, 2014 and 2013, the Company had sales to one entity of approximately 36% and 44%, respectively, of its revenues. At December 31, 2014 and 2013, 40% and 48%, respectively, of accounts receivable were from one customer due to their additional role as a distributor for the Company's radiochemical and nuclear medicine products. The loss of this customer may result in lower revenues and limit the cash available to grow the business and achieve profitability.

j)

Research and development costs

The Company had research and development expenses totaling \$464,206 in 2014 and \$706,048 in 2013.

k)

Share-based compensation

The Company accounts for issuances of share-based compensation to employees in accordance with GAAP which requires the recognition of the cost of employee services received in exchange for an award of equity instruments in the financial statements and is measured based on the grant date fair value of the award. Compensation expense is recognized over the period during which an employee is required to provide service in exchange for the award (the vesting period).

For the years ended December 31, 2014 and 2013, the Company recognized share-based compensation expense of \$243,683 and \$348,506, respectively, related to stock options, warrants and unvested stock grants. This expense is included as part of salaries and contract labor on the accompanying statements of operations.

l)

Net loss per common share basic and diluted

Basic loss per share is computed on the basis of the weighted-average number of common shares outstanding during the year. Diluted loss per share is computed on the basis of the weighted-average number of common shares plus all potentially dilutive issuable common shares outstanding during the year.

At December 31, 2014 and 2013, the Company had the following common stock equivalents outstanding that were not included in the computation of diluted net loss per common share as their effect would have been anti-dilutive, thereby decreasing the net loss per common share:

	<b>December 31,</b>	
	<b>2014</b>	<b>2013</b>
Stock options	27,950,000	16,450,000
Warrants	42,257,951	27,257,951
850 shares of Series B redeemable convertible preferred stock	425,000	425,000
	<b>70,632,951</b>	<b>44,132,951</b>

m)

Business segments and related information

GAAP establishes standards for the way public business enterprises are to report information about operating segments in annual financial statements and requires enterprises to report selected information about operating segments in interim financial reports issued to shareholders. It also establishes standards for related disclosure about products and services, geographic areas and major customers. The Company currently operates in six business segments.

n)

Recent accounting standards

In May 2014, the FASB issued authoritative guidance for revenue and contracts with customers. The core principle of the guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for goods or services. To achieve that core principle, an entity should apply the following steps:

Step 1: Identify the contract(s) with a customer

Step 2: Identify the performance obligation in the contract.

Step 3: Determine the transaction price.

Step 4: Allocate the transaction price to the performance obligation in the contract.

Step 5: Recognize revenue when (or as) the entity satisfies a performance obligation.

An entity should disclose sufficient information to enable users of financial statements to understand the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. Qualitative and quantitative information is required about:

1.

Contracts with customers-including revenue and impairments recognized, disaggregation of revenue and information about contract balances.

2.

Significant judgments and changes in judgments-determining the timing of satisfaction of performance obligations (over time or at a point in time), and determining the transaction price and amount allocated to performance obligations.

3.

Assets recognized from the costs to obtain or fulfill a contract.

For public entities, the amendments in this Update are effective for annual reporting periods beginning after December 15, 2016, including interim periods within that reporting period. Early adoption is not permitted. The Company has not yet determined what effect this standard will have on its results of operations.

In June 2014, the FASB issued authoritative guidance for stock based compensation. The amendments require that a performance target that affects vesting and that could be achieved after the requisite service period be treated as a performance condition. A reporting entity should apply existing guidance as it relates to awards with performance conditions that affect vesting to account for such awards. As such, the performance target should not be reflected in estimating the grant-date fair value of the award. Compensation cost should be recognized in the period in which it becomes probable that the performance target will be achieved and should represent the compensation cost attributable to the period(s) for which the requisite services has already been rendered. If the performance target becomes probable of being achieved before the end of the requisite service period, the remaining unrecognized compensation cost should be recognized prospectively over the remaining requisite service period. The total amount of the compensation cost recognized during and after the requisite service period should reflect the number of awards that are expected to vest and should be adjusted to reflect those awards that ultimately vest. The requisite service period ends when the employee can cease rendering services and still be eligible to vest in the award if the performance target is achieved. As indicated in the definitions of vest, the stated vesting period (which includes the period in which the performance target could be achieved) may differ from the requisite service period. The amendments in this Update are effective for annual periods and interim periods within those annual periods beginning after December 15, 2015. Earlier adoption is permitted. The Company has not yet determined what effect this standard will have on its results of operations.

## NOTE 2 BUSINESS CONDITION AND LIQUIDITY

The Company has a history of recurring losses with an accumulated deficit of \$118,242,224 at December 31, 2014, and a net loss of \$1,545,077 for the year then ended. The Company's working capital, which includes inventory that will not be sold for up to three years, has decreased by \$714,800 from the prior year. The Company has provided cash flows from operations of \$339,808. During 2014, the Company sought to improve future cash flows from operating activities through improving operating cost control measures, obtaining additional quality certifications to permit

expanded sales of products, and raising capital. The Company's net loss was \$1,545,077 in 2014, compared to a net loss of \$2,461,845 in 2013. This is a decrease of \$916,768, or approximately 37%.

The Company has made significant investments in the design, planning and construction of a large scale uranium de-conversion and fluorine extraction facility, a project the Company started in 2004. Since beginning its efforts to design and build this proposed de-conversion facility, the Company acquired seven patents for the Fluorine Extraction Process ( FEP ) and later designed, built, and operated an FEP pilot plant to produce a fluoride gas from de-conversion of uranium tetrafluoride. At the completion of testing in 2013, the pilot plant was shut down. In October 2012, the Company obtained a Nuclear Regulatory Commission ( NRC ) construction and operating license for the planned de-conversion facility which is a forty (40) year operating license and is the first commercial license of this type issued in the U.S. There are no other companies with a similar license application under review by the NRC. Therefore, the NRC license represents a significant competitive barrier and the Company believes that it provides it with a very valuable asset.

Since the start of this project there have been several changes in the nuclear industry that have caused the Company to place this de-conversion project on hold. When the Company began pursuing this project there were three companies planning for construction of new commercial uranium enrichment plants in the U.S. and a fourth company using the Silex laser separation technology for enrichment. The Company was communicating with all of these companies for possible de-conversion agreements to process their tails and was successful in obtaining a de-conversion service agreement with URENCO USA (UUSA) that would use approximately 50% of the installed processing capacity of its proposed de-conversion facility. While the agreement with UUSA remains in place the milestone dates in the agreement for the Company to have an operating de-conversion facility have passed. UUSA has not indicated they intend to terminate the agreement at this time. Instead UUSA and the Company plan to revise the agreement milestone dates at a future time once the Company has a firmer idea of the schedule for resumption of engineering and construction of the project. Plans to obtain additional contracts with the other enrichment companies in order to commit 100% of the planned facility's capacity have been delayed because of the slowdown in nuclear industry growth. Having contracts in place for the full plant capacity is necessary for the Company to obtain financing for the project and it believes that one or more of these companies are likely to resume construction plans on a new enrichment facility within the next few years. When these plans do resume, the Company will once again begin contract talks to commit the remaining capacity for its planned de-conversion facility and continue efforts to obtain project financing to proceed with the design and construction of the facility. It is also expected that the Company will be able to revise its contract dates with UUSA once one of these other enrichment companies resumes construction planning. Therefore, in the fourth quarter of 2013, the Company placed most of the work on that project on hold until additional contracts for de-conversion service could be secured and financing obtained for the project. During the year ended December 31, 2014, the Company incurred costs of approximately \$419,000 to maintain licenses and other necessary project investments. During the same period in 2013, the Company incurred costs of approximately \$820,000 for planning and development activities on the project.

In the meantime, the Company has renewed its focus upon its long-standing core business segments and is working to reduce operating costs as well as create new business opportunities within those segments. The results of these efforts have led to positive cash flow produced by operating activities for 2014. While there can be no assurances that this positive cash flow from operations will continue the Company will continue to work towards that goal and in achieving profitability based upon the performance of our current business segments. The Company believes there are significant future opportunities for growth within the radiochemical, cobalt products, and field services segments and will be exploring those opportunities to expand business and revenue within those segments. The Company will make public announcements of those developments as agreements are put in place to secure those opportunities.

On October 2, 2014, the Company entered into a ten year agreement with the DOE for the irradiation of cobalt targets for the production of cobalt-60. The agreement stipulates that the Company will be able to purchase cobalt targets at a fixed price per target with an annual 5% escalation in price.

### NOTE 3 PURCHASED ASSET AND INVESTMENTS

Interest in RadQual, LLC

The Company owns a 24.5% interest in RadQual, LLC ( RadQual ), with which the Company has an exclusive manufacturing agreement for nuclear medicine products. The 24.5% ownership of RadQual has a balance of \$1,368,185 and is reported as an asset at December 31, 2014. For the year ended December 31, 2014, member distributions from RadQual totaled \$96,681 and were recorded as a reduction of the investment, and for the same period in 2013, member distributions totaled \$82,708. For the years ended December 31, 2014 and 2013, earnings allocated to the Company from RadQual totaled \$96,058 and \$57,650, respectively. These allocated earnings were recorded as equity in net income of affiliate on the Company s consolidated statements of operations.

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At December 31, 2014 and 2013, the Company had receivables from RadQual in the amount of \$310,776 and \$400,025, respectively, which are recorded as part of accounts receivable on the Company's condensed consolidated balance sheet. For the years ended December 31, 2014 and 2013, the Company had revenues from RadQual in the amount of \$2,727,637 and \$3,018,822, respectively, which are recorded as sale of product on the Company's consolidated statements of operations. At December 31, 2014 and 2013, TI Services, LLC had payables to RadQual in the amount of \$103,000 and \$126,000, respectively.

Summarized financial information for RadQual as of the years ended December 31 was as follows:

	<b>2014</b>	<b>2013</b>
Current assets	\$ 499,000	\$ 525,000
Noncurrent assets	59,000	109,000
Current liabilities	499,000	399,000
Noncurrent liabilities	-	190,000
Revenue	3,837,000	3,980,000
Gross profit	921,000	841,000
Net income	\$ 386,000	\$ 259,000

The difference between the Company's investment in RadQual and its underlying equity in net assets of RadQual of \$1,354,000 at December 31, 2014, is accounted for as equity method goodwill and accordingly is not being amortized.

#### Acquisition of interest in TI Services, LLC

In December 2010, the Company together with RadQual, formed a 50% owned joint venture called TI Services, LLC. TI Services, LLC is engaged in the distribution and selling of products related to the nuclear medicine industry. Because the Company controls more than a 50% direct and indirect ownership interest in TI Services, LLC, the assets and liabilities of TI Services, LLC are consolidated with those of the Company, and RadQual's non-controlling interest in TI Services, LLC is included in the Company's financial statements as a non-controlling interest.

#### NOTE 4 INVENTORIES

Inventories consisted of the following at December 31, 2014 and 2013:

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	<b>2014</b>	<b>2013</b>
Raw materials	\$ 91,555	\$ 247,667
Work in progress	943,234	1,206,708
Finished goods	14,317	23,974
	\$ 1,049,106	\$ 1,478,349

Included in inventories are the various pellet holders and housings involved in target fabrication, raw cobalt, strontium and other raw elements, completed flood sources and irradiated cobalt and nuclear medicine-related materials and products.

Work in progress includes cobalt-60 isotopes that are located in the U.S. federal government's Advanced Test Reactor (ATR) located outside of Idaho Falls, Idaho. These isotopes are at various stages of irradiation. At December 31, 2014 and 2013, these isotopes had a carrying value of \$691,501 and \$957,221, respectively. This value is based on accumulated costs which are allocated based on the length of time isotopes undergo irradiation. During the year ended December 31, 2013, it was determined that it would not be cost-effective to incur additional handling and irradiation costs for some cobalt targets held at the reactor. As a result, in 2013, \$193,982 of target inventory was written off to expense.

## NOTE 5 PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are summarized as follows at December 31, 2014 and 2013:

	<b>2014</b>	<b>2013</b>	<b>Estimated Useful Lives</b>
Furniture and fixtures	\$ 382,966	\$ 385,616	3 - 5 years
Transportation equipment	117,726	117,726	5 - 10 years
Plant and improvements	463,754	463,754	5 years
Production equipment	3,348,829	3,267,799	5 - 10 years
	4,313,275	4,234,895	
Accumulated depreciation	(2,098,425)	(1,963,742)	
	\$ 2,214,850	\$ 2,271,153	

Depreciation expense was \$137,861 and \$272,237 for the years ended December 31, 2014 and 2013, respectively.

## NOTE 6 PATENTS AND OTHER INTANGIBLE ASSETS

The Company owns certain patents and patents pending related to a fluorine extraction process, patents for various uses of some fluoride gases as fluorinating agents, and patents for a container to transport radioactive materials. These patents were developed in an effort to expand the possible markets for the high purity fluoride gases the Company will produce with its fluorine extraction process. In 2010, the Company was granted an additional process patent on the FEP process and during 2011 the Company started the process to file for international protections of this patent in South Africa, Japan, Russia, China, Canada, and the European Union. During 2012, the Company was granted additional process patents for the FEP process in the United States. In 2013, the FEP process patent was granted in Russia. In 2014 the patent was granted in South Africa. The applications in all of the other countries are still in process. At the present time, the final value of this patent technology or the feasibility of expanding the fluoride gas markets through the use of this newly patented technology is uncertain.

In late 2010, management became reasonably certain that the NRC would issue the operating license for the planned de-conversion facility in New Mexico about mid-2012 and the Company began in 2011 to capitalize certain costs associated with the licensing and planning process. Previous to 2011, these costs were included as part of research and development expense. During 2014 there were no costs capitalized with regard to this facility and during 2013, \$376,000 was capitalized. In October 2012, the NRC issued the Company a 40-year construction and operating license. The license will be amortized over its 40-year life.

The following table summarizes the patent and intangible activity for the years ended December 31, 2014 and 2013:

	<b>2014</b>	<b>2013</b>
Beginning	\$ 4,867,867	\$ 4,833,277
Additions	33,831	34,590
Ending	4,901,698	4,867,867
Accumulated amortization	(502,515)	(389,156)
	\$ 4,399,183	\$ 4,478,711

During the years ended December 31, 2014 and 2013, the Company recognized \$113,359 and \$131,069 of amortization expense, respectively.

Patent and other intangible asset amortization is based on the remaining life of the asset and estimated amortization expense is as follows

<b>Years ending December 31,</b>	
2015	\$ 124,975
2016	124,975
2017	124,975
2018	124,975
2019	124,975
Thereafter	3,774,308
	\$ 4,399,183

#### NOTE 7 CONVERTIBLE DEBENTURES AND NOTES PAYABLE

##### Convertible debentures

In July 2012, the Company entered into a securities purchase agreement with certain institutional and private investors pursuant to which it sold convertible debentures for an aggregate of \$3,069,900. The debentures bear interest at 8%, mature in July 2017 and are unsecured. Interest is paid annually on these debentures and the first interest payment was made in September 2013. In October 2014, the Company made the second interest payment to holders of the convertible debentures. According to the terms of the debentures, the interest payment was for interest accrued on principal amounts held by investors from October 2013 through September 2014. The amount of interest paid in cash to investors was \$229,370 in the aggregate. In addition, two investors opted to receive shares of the Company's common stock in lieu of cash interest payments. As a result, 399,401 shares of common stock were issued in exchange for \$15,976 of accrued interest due. Interest payments thereafter will be paid semi-annually on March 30<sup>th</sup> and September 30<sup>th</sup>, beginning March 2015. These debentures are convertible at any time into shares of the Company's common stock at an initial conversion price of \$0.225 per share, subject to adjustment in certain conditions. Under certain conditions, the Company may force the conversion of the debentures. In addition, after the second anniversary of the closing date, the Company will have the right to redeem all or part of the debentures at any time prior to the maturity date. The Company also held the right, prior to the second anniversary of the closing date, to redeem all or part of the debentures if the Company successfully consummated a financing of the proposed Lea County, New Mexico de-conversion facility in the amount of at least \$25 million. This financing was not obtained and the Company did not redeem the debentures. Any redemption of the debentures by the Company requires the payment of a redemption fee as set forth in the debentures.

Each investor also received a common stock purchase warrant to purchase common stock equal to twenty five percent (25%) of the shares issuable upon conversion of the debentures. The warrants are immediately exercisable at a price of \$0.30 per share and have a term of five years.

In accordance with FASC 470-20, Accounting for Convertible Debt Instruments that may be settled in cash upon conversion, the Company allocated the proceeds to the debentures and warrants based on their relative fair value, which resulted in \$2,703,144 being allocated to the debentures and \$366,756 being allocated to the warrants. Subsequent to the allocation, the Company calculated a beneficial conversion feature of \$25,656. The allocated warrant value and the beneficial conversion feature were recorded as debt discount and will be accreted to interest expense over the five-year life of the debentures. During the period ended December 31, 2014 and 2013, \$73,352 of the fair value of the warrants was accreted to interest expense and \$5,131 of the beneficial conversion feature was accreted to interest expense during each period.

In connection with this offering, the Company paid a fee and issued to the placement agent a warrant to purchase 1,091,520 shares of the Company's common stock. The placement warrant had a fair value of \$133,285. The value of the placement warrant and the fees are recorded as offering costs and will be amortized to expense over the life of the debentures.

The fair value of the warrants, determined using the Black-Scholes Option Pricing Model, was calculated using the following assumptions: risk-free interest rate of .65%, expected dividend yield of 0%, expected volatility of 88%, and an expected life of 5 years.

In February 2013, the Company entered into a securities purchase agreement with certain private investors pursuant to which it sold convertible debentures for an aggregate of \$1,060,000. The debentures accrue interest at a rate of 10% per annum, compounded annually and matured February 2015. On February 20, 2015, according to the terms of the note, principal totaling \$1,060,000, plus accrued interest of \$222,600, was converted into shares of the Company's common stock. The conversion terms of the note stipulated that the number of shares issued would be based on the lesser of the stated conversion price of \$0.14 per share or the average trading price of the Company's stock for the preceding 120 days prior to conversion. The average trading price for the preceding 120 days was \$0.04 per share, and therefore, 32,065,000 shares were issued to holders of the convertible debentures upon conversion on February 20, 2015. The fair market value of the Company's common stock was \$0.15 per share on the date of the agreement. Consequently, the difference between the anticipated conversion price of \$0.14 and the closing price of \$0.15, multiplied by the number of issuable common shares upon conversion, was recorded as a beneficial conversion feature with an increase to equity and a debt discount in the amount of \$75,715. This amount was accreted to interest expense through February 2015. During the year ended December 31, 2014 and 2013, \$37,857 and \$32,449, respectively, of the beneficial conversion feature was amortized to interest expense.

#### Notes payable

During April 2013, the Company negotiated with the NRC to convert amounts owing as a trade payable into a long-term note. The Company converted a total of \$596,816 to the note payable which is payable in monthly installments of \$17,500 and accrues interest at a rate of 1% annually. The note matures February 15, 2016 and is unsecured.

In December 2013, the Company borrowed \$500,000 from the Company's Chairman of the Board and one of the Company's major shareholders. The \$500,000 note bears interest at 6% and is due June 30, 2014. At any time, the lenders may settle any or all of the principal and accrued interest with shares of the Company's common stock. In connection with the note, each of the two lenders was issued 5,000,000 warrants to purchase shares of the Company's common stock. The fair value of the warrants was \$383,025 and was recorded as debt discount and will be amortized to interest expense over the life of the loan. The warrants were immediately exercisable at a price of \$0.06 per share and have a term of five years. The fair value of the warrants was determined using the Black-Scholes Option Pricing Model and was calculated using the following assumptions: risk free interest rate of 1.66%, expected dividend yield of 0%, expected volatility of 78.9%, and an expected life of 5 years.

In June 2014, the Company renegotiated the terms of this promissory note. Pursuant to the modification, the maturity date was extended to December 31, 2017, and each Lender was granted an additional 7,500,000 warrants to purchase shares of the Company's common stock at \$0.06 per share. The warrants were immediately exercisable. The fair value

of these warrants was \$384,428 and was recorded as a debt discount and will be amortized to interest expense over the new life of the promissory note. The fair value of the warrants was determined using the Black-Scholes Option Pricing Model and was calculated using the following assumptions: risk free interest rate of 1.62%, expected dividend yield rate of 0%, expected volatility of 69.47%, an expected life of 4.5 years. The Company calculated a beneficial conversion feature of \$15,464 which will be accreted to interest expense over the new life of the note.

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Notes payable as of December 31, 2014 and 2013 consist of the following:

**Notes Payable Table:**

	<b>2014</b>	<b>2013</b>
Note payable to the NRC bearing interest at 1% monthly installments of \$17,500, unsecured	\$ 254,198	\$ 460,453
Convertible notes payable, bearing interest at 10%, due February 20, 2015	1,060,000	1,060,000
Convertible notes payable, bearing interest at 8%, due July 27, 2017	3,069,900	3,069,900
Note payable to related parties bearing interest at 6% all principal interest due on December 31, 2017, secured	500,000	500,000
Total notes payable	\$ 4,884,098	\$ 5,090,353
Less: unamortized debt discount	(548,479)	(688,330)
Less: current maturities	(1,268,327)	(341,373)
Notes payable, net of current installments and debt discount	\$ 3,067,292	\$ 4,060,650

Maturities of convertible debt and notes payable at December 31, 2014, are as follows:

**Current Maturities Table**

<b>Years ending December 31,</b>	
2015	\$ 1,268,327
2016	45,871
2017	3,569,900
Thereafter	-
	\$ 4,884,098

**NOTE 8 LEASE OBLIGATIONS**

Operating leases

The Company currently leases office space under a ten year operating lease that expires in 2021. The Company previously held a second lease which was terminated in April 2013. Rental expense under the leases for the years ended December 31, 2014 and 2013 was \$136,313 and \$156,780, respectively.

The following is a schedule by years of the currently held operating lease as of December 31, 2014:

**Years ending December 31,**

2015	\$ 136,313
2016	136,313
2017	136,313
2018	136,313
2019	136,313
Thereafter	181,631
	\$ 863,196

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## NOTE 9 SHAREHOLDERS EQUITY, REDEEMABLE CONVERTIBLE PREFERRED STOCK, OPTIONS AND WARRANTS

Warrants

As disclosed in Note 7, on July 27, 2012, the Company entered into a securities purchase agreement with certain institutional and private investors. Each investor also received a common stock purchase warrant to purchase such number of shares of our common stock equal to twenty-five percent (25%) of the number of shares of common stock that the note purchased by such investor may be convertible into on the closing date. The total possible number of warrants to be issued is 4,502,520. The warrants are immediately exercisable at a price of \$0.30 per share and have a term of five years. The fair value of the warrants, determined using the Black-Scholes Option Pricing Model, was calculated using the following assumptions: risk-free rate of .650%, expected dividend yield of 0%, expected volatility of 88%, and an expected life of 5 years.

On September 3, 2013, in an effort to raise capital to support its ongoing planned uranium de-conversion project, the Company authorized an offer to its current warrant holders to encourage them to exercise outstanding warrants. The offer gave warrant holders two options. The first option allowed holders of the Company's outstanding warrants to exchange one warrant for one share of the Company's common stock at a discounted warrant exercise price of \$0.09 per share until close of business on October 4, 2013. The second option allowed holders of the Company's outstanding warrants to exchange two Class H or K Warrants, or four Class F or I Warrants, for one share of the Company's common stock at a discounted price of \$0.06 per share. The Company discounted the exercise price of (i) its Class F Warrants which were issued on November 7, 2008, from \$0.30 to \$0.09 under Option 1, and to \$0.06 under Option 2, (ii) its Class H Warrants, which were issued August 24, 2011, from \$0.22 to \$0.09 under Option 1, and to \$0.06 under Option 2, (iii) its Class I Warrants, which were issued on October 29, 2010, from \$0.40 to \$0.09 under Option 1, and to \$0.06 under Option 2, and (iv) its Class K Warrants, which were issued on July 27, 2012, from \$0.30 to \$0.09 under Option 1 and to \$0.06 under Option 2. In addition to the reduced exercise price, Class K Warrant holders could also apply the accrued interest on their outstanding convertible subordinated notes, due to be paid on September 30, 2013, towards the cash exercise price of either option. As a result of this offer, 557,021 warrants were exercised under Option 1 and the company issued 557,021 shares of its common stock for proceeds of \$50,132. \$46,193 of these proceeds was applied to outstanding interest. Under Option 2, 17,244,331 warrants were exercised and the Company issued 6,170,951 shares of its common stock for proceeds of \$370,257. \$64,540 of these proceeds was applied to outstanding interest. In total, as a result of this offer, 17,801,352 warrants were exercised and Company issued 6,727,972 shares of its common stock for proceeds of \$420,389, and \$110,733 of the proceeds was applied to outstanding interest. In September 2013, the 3,000,000 remaining Class F Warrants expired.

The following table summarizes warrant activity for the years ended December 31, 2014 and 2013:

Warrants	Outstanding	Weighted
	Shares	Average

		<b>Exercise</b>	
			<b>Price</b>
Outstanding at December 31, 2012	38,059,303	\$	0.26
Granted	10,000,000		0.06
Exercised	(17,801,352)		0.06
Forfeited	(3,000,000)		0.30
Outstanding at December 31, 2013	27,257,951		0.26
Granted	15,000,000		0.06
Exercised	-		-
Forfeited	-		-
Outstanding at December 31, 2014	42,257,951	\$	0.18

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Mandatorily Redeemable Convertible Preferred Stock

The Company is authorized to issue up to 5,000,000 shares of preferred stock, par value \$0.01 per share. The Board of Directors is authorized to set the distinguishing characteristics of each series prior to issuance, including the granting of limited or full voting rights, rights to the payment of dividends and amounts payable in event of liquidation, dissolution or winding up of the Company.

At December 31, 2014, there were 850 shares of the Series B Preferred Stock outstanding with a mandatory redemption date of May 2022 at \$1,000 per share or \$850,000. The shares are also convertible into common stock at a conversion price of \$2.00 per share. These preferred shares carry no dividend preferences. Due to the mandatory redemption provision, the Series B Preferred Stock has been classified as a liability in the accompanying balance sheets.

Employee Stock Purchase Plan

In September 2004, the Company's Board of Directors (the Board) approved an employee stock purchase plan for an aggregate of up to 2,000,000 shares of the Company's common stock. The plan allows employees to deduct up to 15% of their payroll each pay period to be used for the purchase of common stock at a discounted rate. The common shares will be purchased at the end of each three-month offering period or other period as determined by the Board. The Plan is intended to qualify as an employee stock purchase plan under Section 423 of the Internal Revenue Code.

During 2014 and 2013, the Company issued 196,872 and 93,970 shares of common stock to employees for proceeds of \$8,417 and \$10,560, respectively, in accordance with the employee stock purchase plan.

Subsequent to December 31, 2014, the Company issued 60,715 shares of common stock for proceeds of \$1,548 under this employee stock purchase plan.

2006 Equity Incentive Plan

In April 2006, the Company adopted the International Isotopes Inc. 2006 Equity Incentive Plan (the 2006 Plan). The 2006 Plan was approved by shareholders in July 2006. The 2006 Plan replaced the Company's 2002 Long-Term Incentive Plan (the Prior Plan). The 2006 Plan permits the granting of any or all of the following types of awards: (1) incentive and nonqualified stock options, (2) stock appreciation rights, (3) stock awards, restricted stock and stock

units, (4) performance shares and performance units conditioned upon meeting performance criteria, and (5) other stock- or cash-based awards.

The 2006 Plan authorizes the issuance of up to 20,000,000 shares of common stock, plus 1,350,000 shares issued but not subject to outstanding awards under the Prior Plan. There are also 13,000,000 shares granted and outstanding under the Prior Plan that could become available for issuance under the 2006 Plan (for example, if they are forfeited or otherwise expire or terminate without the issuance of shares). Unless earlier terminated, the 2006 Plan will terminate on July 12, 2016. At December 31, 2014, there were 466,350 shares available for issuance under this plan.

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Non-Vested Stock Grants

There were no non-vested stock awards outstanding during the year ended December 31, 2014. Non-vested stock awards outstanding at December 31, 2013 and changes during the same year were as follows:

		<b>Weighted</b>
		<b>average grant</b>
<b>Non-vested Stock Awards</b>	<b>2013</b>	<b>date fair value</b>
Balance at beginning of year	\$ 151,720	\$ 0.18
Granted	-	-
Vested	(151,750)	0.18
Forfeited	-	
Non-vested shares at end of year	\$ -	

The intrinsic value of stock awards vested during the years ended December 31 2013 was \$0. During the year ended December 31, 2013 the Company recognized \$283 of compensation expense.

Pursuant to an employment agreement, the Company issued 167,860 in fully vested shares of Company stock in February 2014, under the 2006 Equity Incentive Plan to a member of Company management. The number of shares awarded was based on a \$28,000 stock award using a price of \$0.10 per share. The agreement states that the number of shares issued will be based on the average closing price of common stock for the 20 trading days prior to the issue date but not less than \$0.10 per share. Compensation expense recorded pursuant to this stock grant was \$10,072, which was determined by multiplying the number of shares awarded by the closing price of commons stock on February 27, 2014, which was \$0.06 per share. 112,140 shares were retained in a cashless exercise by the Company to satisfy the employee s payroll tax liabilities. The net shares issued on February 27, 2014 totaled 167,860 shares.

Pursuant to the employment agreement noted above, the Company issued 175,000 in fully vested shares of Company stock in February 2013 under the 2006 Equity Incentive Plan to a member of Company management. The number of shares issued was calculated using the average closing price of common stock for the 20 trading days prior to the issue date. 70,088 shares were retained in a cashless exercise by the Company to satisfy the employee s payroll tax liabilities. The net shares issued on February 28, 2013 totaled 104,912 shares.

In January 2013, the Company issued 750,000 nonqualified stock options to certain consultants under the 2006 Plan. The options have an exercise price of \$0.15 per share and vest 25% on the first anniversary of the grant date with 25% vesting after each additional one-year period of continuous service. In November 2013, these options were re-priced to an exercise price of \$0.07 per share. The options expire 10 years from the date of grant. The options had a fair value of \$100,923 or \$0.135 per share as estimated on the date of grant using the Black-Scholes options pricing model with the following weighted average assumptions: risk-free interest rate of 1.87%, expected dividend yield rate

of 0%, expected volatility of 84.62%, and an expected life of 10 years.

Pursuant to a Board resolution on January 10, 2013, the Company re-priced 600,000 options which had an original exercise price of \$0.32 per share and expire on May 4, 2019. The stock options were adjusted to an exercise price of \$0.15 per share with the expiration date remaining May 4, 2019. The option re-price had a fair value of \$11,145 as estimated on the date of re-pricing using the Black-Scholes options pricing model with the following weighted-average assumptions: risk free interest rate of 1.26%, expected dividend yield rate of 0%, expected volatility of 84.20%, and an expected life of 6.29 years.

In April 2013, 2,000,000 nonqualified stock options were exercised under a partial cashless exercise. The Company received proceeds of \$30,000 and issued 1,793,104 shares of common stock.



Pursuant to a Board resolution on November 11, 2013, the Company re-priced 11,850,000 options which had previous exercise prices between \$0.15 and \$0.70 per share and expire between October 31, 2017 and January 18, 2023. The stock options were adjusted to an exercise price of \$0.07 per share with the expiration dates remaining unchanged. An additional \$156,499 of compensation expense was recognized in the current period and \$15,175 will be recognized in future periods. The option re-price had a fair value of \$171,674 as estimated on the date of re-pricing using the Black-Scholes options pricing model with the following weighted-average assumptions: risk free interest rate of 1.47%, expected dividend yield rate of 0%, expected volatility of 78.68%, and an expected life between 3.97 and 9.19 years.

On October 27, 2014, the Compensation Committee of the Company's Board of Directors approved the re-pricing of an aggregate of 14,500,000 outstanding stock options held by executive officers and members of the Board, which had original exercise prices of either \$0.07 or \$0.08 per share. The Compensation Committee lowered the exercise price per share to \$0.035 for each option, which was the fair market value of the Company's stock on October 27, 2014. The expiration dates remaining unchanged. An additional \$99,068 of compensation expense was recognized in the current period and \$2,694 will be recognized in future periods. The option re-price had a fair value of \$102,322 as estimated on the date of re-pricing using the Black-Scholes options pricing model with the following weighted-average assumptions: risk free interest rate of between 0.41% and 1.94%, expected dividend yield rate of 0%, expected volatility between 51.49% and 79.32%, and an expected life between 1.80 and 7.93 years.

In addition, on October 27, 2014, the Compensation Committee granted an aggregate of 8,100,000 incentive stock options to executive officers and employees with an exercise price of \$0.035 per share. Also, the Compensation Committee granted 400,000 nonqualified stock options to consultants and 3,000,000 nonqualified stock options to members of the Board. All of the stock options were granted with an exercise price of \$0.035 per share, vest one third immediately, one third in one year, and one third in two years, and expire on October 27, 2024. The options had a fair value of \$206,670 as estimated on the date of issue using the Black-Scholes options pricing model with the following weighted-average assumptions: risk free interest rate of 1.51%, expected dividend yield rate of 0%, expected volatility of 74.68%, and an expected life between 5.00 and 5.80 years.

### Stock Options

A summary of the stock options issued under the Company's 2006 Plan is as follows:

<b>Options</b>	<b>Weighted Average Exercise Price</b>	<b>Weighted Average Remaining Contractual</b>	<b>Aggregate Intrinsic Value</b>
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			<b>Life</b>	
Outstanding at December 31, 2012	17,700,000	\$	0.23	
Granted	750,000		0.15	
Exercised	(2,000,000)		0.03	
Forfeited	-		-	
Outstanding at December 31, 2013	16,450,000		0.09	
Granted	11,500,000		0.04	
Exercised	-			
Forfeited	-			
Outstanding at December 31, 2014	27,950,000	\$	0.05	6.5
Exercisable at December 31, 2014	18,720,833	\$	0.06	5.0

The total intrinsic value of stock options exercised in 2014 and 2013 was \$0.

The total intrinsic value of stock options outstanding at December 31, 2014 was \$0. The intrinsic value for stock options outstanding is calculated as the amount by which the quoted price of \$0.03 of our common stock as of the end of 2014 exceeds the exercise price of the options.

The Company recognized \$234,635 and \$331,437 of compensation expense related to these options for the years ended December 31, 2014 and 2013, respectively.

All options exercised were issued under a qualified plan and accordingly, there is no income tax effect in the accompanying financial statements.

#### NOTE 10 INCOME TAXES

The Company paid no federal or state income taxes during 2014 and 2013. Income tax benefit on losses differed from the amounts computed by applying the U.S. federal income tax rate of 34% to pretax losses as a result of the following:

	<b>2014</b>	<b>2013</b>
Income tax benefit	\$ (554,065)	\$ (837,028)
Nondeductible expenses	93,792	146,912
State taxes net of federal benefit	(74,962)	(113,245)
Change in valuation allowance	535,235	803,361
	\$ -	\$ -

The tax effects of temporary differences that give rise to significant portions of the Company's deferred tax assets (liabilities) as of December 31, 2014 and 2013 are presented below:

	<b>2014</b>	<b>2013</b>
Deferred income tax asset	\$ -	\$ -
Net operating loss carryforward	11,672,252	11,191,259
Valuation allowance	(11,559,567)	(11,024,333)
Total deferred income tax asset	112,685	166,926
Deferred income tax liability - depreciation	(112,685)	(166,926)
Deferred tax asset (liability)	\$ -	\$ -

At December 31, 2014, the Company had net operating losses of approximately \$29,700,000 that will begin to expire in 2023. The valuation allowances for 2014 and 2013 have been applied to offset the deferred tax assets in recognition of the uncertainty that such benefits will be realized.

In accordance with GAAP, the Company has analyzed its filing positions in all jurisdictions where it is required to file income tax returns for the open tax years in such jurisdictions. The Company has identified its federal income tax returns for the years ended December 31, 2011 through 2014 as remaining subject to examination. The Company's income tax returns in state income tax jurisdictions remain subject to examination for years ended December 31, 2011 through 2014. The Company currently believes that all significant filing positions are highly certain and that all of its significant income tax filing positions and deductions would be sustained upon audit. Therefore, the Company has no significant reserves for uncertain tax positions, and no adjustment to such reserves was required by GAAP. No interest or penalties have been levied against the Company and none are anticipated, therefore no interest or penalty has been included in the provision for income taxes in the consolidated statements of operations.

The Internal Revenue Code contains provisions which reduce or limit the availability and utilization of net operating loss carry forwards in the event of a more than 50% change in ownership. If such an ownership change occurs with the Company, the use of these net operating losses could be limited.

NOTE 11 COMMITMENTS AND CONTINGENCIES

Dependence on third parties

The production of HSA Cobalt is dependent upon the U.S. Department of Energy, and its prime operating contractor, which controls the reactor and laboratory operations. The production of HSA Cobalt is dependent upon the DOE, and its prime operating contractor, which controls the reactor and laboratory operations at the ATR located outside of Idaho Falls, Idaho. The Company has been in negotiations with the DOE, since 2012, to determine further irradiation of in-process targets and to start the irradiation of new cobalt targets. On October 2, 2014, the Company signed a ten year contract with the DOE for the irradiation of cobalt targets for the production of cobalt-60. The Company will be able to purchase cobalt targets for a fixed price per target and with an annual 5% escalation in price. The contract term is October 1, 2014, through September 30, 2024. However, the DOE may end the contract if it determines termination is necessary for the national defense, security or environmental safety of the United States. If this were to occur, all payments made by the Company would be refunded.

Nuclear Medicine Reference and Calibration Standard manufacturing is conducted under an exclusive contract with RadQual, which in turn has an agreement in place with several companies for distributing the product. The majority of the radiochemical product sold by the Company is provided through a supply agreement with a single entity. A loss of any of these customers or suppliers could adversely affect operating results by causing a delay in production or a possible loss of sales.

Contingencies

Because all of the Company's business segments involve radioactive materials, the Company is required to have an operating license from the NRC and specially trained staff to handle these materials. The Company has an NRC operating license and has amended this license several times to increase the amount of material permitted within the facility. Additional processing capabilities and license amendments could be implemented that would permit processing of other reactor-produced radioisotopes by the Company, but this license does not currently restrict the volume of business operations performed or projected to be performed in the coming year. The financial assurance required by the NRC to support this license has been provided for with a Letter of credit and a restricted certificate of deposit held with Wells Fargo Bank. Previously the Company maintained a surety bond issued by Argonaut Insurance Company, however, this surety bond was terminated in November 2014 and was replaced with the Letter of Credit and restricted certificate of deposit.

Defined Contribution Pension Plan

The Company has a 401(k) defined-contribution pension plan (the Plan ) for which employees are eligible after completing six months of full-time service. Participants, under provision of Internal Revenue Code § 401(k), may elect to contribute up to \$17,500 of their compensation to the Plan which includes both before-tax and Roth after-tax contribution options. Although the Company reserves the right to make discretionary matching contributions to participant accounts, there were no employer matching contributions made for either 2014 or 2013. All amounts withheld for employee contributions were made during 2014. The employer reserves the right to terminate the Plan at any time.

#### NOTE 12 ASSET RETIREMENT OBLIGATION

As part of the Company's NRC operating license and as part of the Company's facility lease agreements, the Company is responsible for decommissioning any facilities upon termination or relocation of operations. The Company has developed a decommissioning funding plan using guidance provided by the NRC and estimated the cost of decommissioning the facility in Idaho Falls. The decommissioning cost estimate is reviewed at least annually to validate the assumptions and is revised as necessary when changes in the facility processes or radiological characteristics would affect the cost of decommissioning.

In accordance with GAAP, the Company has recognized future estimated decommissioning costs as an asset retirement obligation and a related capitalized lease disposal cost. The Company has recognized period-to-period changes in the liability (accretion) in the statement of operations as amortization expense. Changes resulting from revisions to the original estimate are recorded as an increase or decrease to the capitalized lease disposal cost. Capitalized lease disposal cost is amortized on a straight-line basis over the remaining life of the facility operating lease agreement. In November 2014, the Company updated its decommissioning funding Plan and, at that time, the current values of both the retirement obligation and capitalized cost were evaluated. It was determined that because of a decrease in the risk-free interest rate used in the obligation computation, the retirement obligation should be decreased. As a result of this decrease, the retirement obligation was reduced by \$162,426 to \$450,630 and the capitalized cost was reduced from \$77,899 to zero. The difference of \$84,527 was recorded as a decrease to amortization expense.

The following summarizes the activity of the asset retirement obligation for the years ended December 31, 2014 and 2013:

	<b>Obligation for</b>	<b>Capitalized</b>
	<b>Lease Disposal</b>	<b>Lease Disposal</b>
	<b>Cost</b>	<b>Cost</b>
Balance at December 31, 2012	\$ 523,238	\$ 102,499
Increase in lease disposal costs	-	-
Accretion expense / Amortization expense	43,131	(12,300)
Balance at December 31, 2013	566,369	90,199
Decrease in lease disposal costs	(162,426)	(77,899)
Accretion expense / Amortization expense	46,687	(12,300)
Balance at December 31, 2014	\$ 450,630	\$ -

#### NOTE 13 FAIR VALUE MEASUREMENTS

At December 31, 2014 and 2013, the Company had no assets carried at fair value.

#### NOTE 14 SEGMENT INFORMATION

Information related to the Company's reportable operating business segments is shown below. The Company's reportable segments are reported in a manner consistent with the way management evaluates the businesses. The Company identifies its reportable business segments based on differences in products and services. The accounting policies of the business segments are the same as those described in the summary of significant accounting policies.

The Company has identified the following business segments:

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The Nuclear Medicine Standards segment consists of the manufacture of sources and standards associated with SPECT (Single Photon Emission Computed Tomography) imaging, patient positioning, and calibration or operational testing of dose measuring equipment for the nuclear pharmacy industry and includes consolidated reporting of TI Services, LLC, the Company's 50/50 joint venture with RadQual, LLC.

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The Cobalt Products segment includes the fabrication of cobalt capsules for teletherapy or irradiation devices, and recycling of expended cobalt sources.

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The Radiochemical Products segment includes production and distribution of various isotopically pure radiochemicals for medical, industrial, or research applications. These products are either directly produced by the Company or are purchased in bulk from other producers and distributed by the Company in customized packages and chemical forms tailored to customer and market demands. Iodine-131 is the most predominant radiochemical sold in this segment.



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The Fluorine Products segment historically involved the production of small scale qualification samples of high purity fluoride gas for various industrial applications, as well as development of laboratory and analytical processes required to support the planned uranium de-conversion and fluorine extraction facility. During 2013, these testing activities were completed and the pilot plant facility was closed. The Company has developed or acquired all patent rights to these processes. Future work in this segment will involve license support and, as financing permits, further work related to the de-conversion facility in New Mexico.

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The Radiological Services segment concerns a wide array of miscellaneous services that consists of gemstone processing and field services that include source installation, removal, and radiation device decommissioning.

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The Transportation segment provides transportation services for the Company's products and offers for hire transportation services of hazardous and non-hazardous cargo materials.

The following presents certain segment information as of and for the years ended December 31, 2014 and 2013:

<b>Sale of product</b>	<b>2014</b>	<b>2013</b>
Radiochemical products	\$ 1,742,495	\$ 1,636,535
Cobalt products	1,791,906	1,080,011
Nuclear medicine standards	3,267,254	3,249,126
Radiological services	621,431	763,980
Fluorine products	-	-
Transportation	113,775	119,498
Total segments	7,536,860	6,849,150
Corporate revenue	-	-
Total consolidated	\$ 7,536,860	\$ 6,849,150

<b>Depreciation and amortization</b>	<b>2014</b>	<b>2013</b>
Radiochemical products	\$ 7,178	\$ 33,027
Cobalt products	73,071	80,929
Nuclear medicine standards	19,162	20,856
Radiological services	29,436	10,333
Fluorine products	109,253	187,831
Transportation	6,780	12,873
Total segments	244,880	345,849
Corporate depreciation and amortization	96,538	69,758
Total consolidated	\$ 341,418	\$ 415,607

<b>Segment income (loss)</b>	<b>2014</b>	<b>2013</b>
Radiochemical products	\$ 366,223	\$ 223,011
Cobalt products	736,405	62,791
Nuclear medicine standards	636,322	609,107
Radiological services	201,169	430,525
Fluorine products	(418,887)	(819,848)
Transportation	(24,653)	(29,842)
Total segments	1,496,579	475,745
Corporate loss	(3,041,655)	(2,937,589)
Net loss	\$ (1,545,077)	\$ (2,461,845)

<b>Expenditures for segment assets</b>	<b>2014</b>	<b>2013</b>
Radiochemical products	\$ 53,320	\$ 4,356
Cobalt products	19,042	-
Nuclear medicine standards	528	3,540
Radiological services	2,632	150,840

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Fluorine products	39,866	413,365
Transportation	-	-
Total segments	115,388	572,101
Corporate purchases	-	-
Total consolidated	\$ 115,388	\$ 572,101

<b>Segment assets</b>	<b>2014</b>	<b>2013</b>
Radiochemical products	\$ 230,257	\$ 153,305
Cobalt products	1,035,226	1,574,603
Nuclear medicine standards	564,034	573,389
Radiological services	381,898	608,949
Fluorine products	5,996,258	6,093,151
Transportation	8,434	12,864
Total segments	8,216,107	9,016,261
Corporate assets	2,734,030	2,991,753
Total consolidated	\$ 10,950,137	\$ 12,008,014

NOTE 15 SUBSEQUENT EVENTS

On January 16, 2015, the Company entered into an agreement with a customer to purchase cobalt-60 material that will become available in approximately 2017. The terms of the agreement required a commitment fee of \$74,000, which was due upon the signing of the agreement, plus quarterly payments of \$7,300 beginning March 2015.

On February 20, 2015, convertible debentures with principal totaling \$1,060,000, plus accrued interest of \$222,600, were converted into 32,065,000 shares of the Company's common stock. Refer to Note 7 for further details.

Pursuant to an employment agreement, the Company issued to a member of Company management 280,000 shares of fully-vested Company stock in February 2015 under the 2006 Equity Incentive Plan. The number of shares awarded was based on a \$28,000 stock award using a price of \$0.10 per share. The agreement states that the number of shares issued will be based on the average closing price of common stock for the 20 trading days prior to issue date but not less than \$0.10 per share. Compensation expense recorded pursuant to this transaction was \$16,800, which was determined by multiplying the number of shares awarded by the closing price of the stock on February 27, 2014, which was \$0.06 per share. There were 112,140 shares retained in the cashless exercise by the Company to satisfy the employee's payroll tax liabilities. The net shares issued on February 28, 2014 totaled 167,860 shares.