

INTERNATIONAL ISOTOPES INC  
Form 10-Q  
August 14, 2017

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

**FORM 10-Q**

(Mark One)

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

For the quarterly period ended June 30, 2017

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:

0-22923

**INTERNATIONAL ISOTOPES INC.**

*(Exact name of registrant as specified in its charter)*

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

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

**4137 Commerce Circle**

**Idaho Falls, Idaho, 83401**

*(Address of principal executive offices, including zip code)*

**(208) 524-5300**

*(Registrant's telephone number, including area code)*

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

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

Large accelerated filer

Non-accelerated filer

(Do not check if a smaller reporting company)

Accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards pursuant to Section 13(a) of the Exchange Act.

As of August 4, 2017, the number of shares of common stock, \$.01 par value, outstanding was 406,755,371.

**INTERNATIONAL ISOTOPES INC.**

**FORM 10-Q**

**For The Quarter Ended June 30, 2017**

**TABLE OF CONTENTS**

	<b><u>Page</u></b> <b><u>No.</u></b>
<b>PART I FINANCIAL INFORMATION</b>	
<u>Item 1.</u>	
<u>Financial Statements</u>	
<u>Unaudited Condensed Consolidated Balance Sheets</u> <u>at June 30, 2017 and December 31, 2016</u>	3
<u>Unaudited Condensed Consolidated Statements of</u> <u>Operations for the Three and Six Months Ended</u> <u>June 30, 2017 and 2016</u>	4
<u>Unaudited Condensed Consolidated Statements of</u> <u>Cash Flows for the Six Months Ended June 30, 2017</u> <u>and 2016</u>	5
<u>Notes to Unaudited Condensed Consolidated</u> <u>Financial Statements</u>	6
<u>Management's Discussion and Analysis of Financial</u> <u>Condition and Results of Operations</u>	16
<u>Item 2.</u>	
<u>Item 4.</u>	
<u>Controls and Procedures</u>	29
<b>PART II OTHER INFORMATION</b>	
<u>Item 1.</u>	
<u>Legal Proceedings</u>	30
<u>Item 1A.</u>	
<u>Risk Factors</u>	30
<u>Unregistered Sales of Equity Securities and Use of</u> <u>Proceeds</u>	30
<u>Item 2.</u>	
<u>Item 6.</u>	
<u>Exhibits</u>	31
<u>Signatures</u>	32



## Part I. Financial Information

## Item 1. Financial Statements

**INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES****Unaudited Condensed Consolidated Balance Sheets**

	<b>June 30, 2017</b>	<b>December 31, 2016</b>
Assets		
Current assets		
Cash and cash equivalents	\$ 600,189	\$ 314,520
Accounts receivable	869,275	774,275
Inventories	1,831,133	1,476,240
Prepays and other current assets	498,810	736,447
Total current assets	3,799,407	3,301,482
Long-term assets		
Restricted money market account	451,627	450,631
Property, plant and equipment, net	1,903,686	1,948,076
Investment	1,505,019	1,492,781
Patents and other intangibles, net	4,139,866	4,186,295
Total long-term assets	8,000,198	8,077,783
Total assets	\$ 11,799,605	\$ 11,379,265
Liabilities and Stockholders' Equity		
Current liabilities		
Accounts payable	\$ 1,376,470	\$ 941,659
Accrued liabilities	616,827	568,714
Convertible debt, net of debt discount	254,544	3,025,165
Current portion of unearned revenue	2,763,948	2,608,328
Current installments of notes payable	7,191	366,953
Total current liabilities	5,018,980	7,510,819
Long-term liabilities		
Obligation for lease disposal costs	473,675	468,974
Unearned revenues, net of current portion	364,440	364,440
Notes payable, net of current portion and debt discount	438,646	428,891
Mandatorily redeemable convertible preferred stock	4,464,250	850,000
Total long-term liabilities	5,741,011	2,112,305
Total liabilities	10,759,991	9,623,124
Stockholders' equity		

Edgar Filing: INTERNATIONAL ISOTOPES INC - Form 10-Q

Common stock, \$0.01 par value; 750,000,000 shares authorized; 406,730,902 and 404,999,758 shares issued and outstanding respectively	4,067,309	4,049,998
Additional paid in capital	120,248,686	119,595,535
Accumulated deficit	(123,328,024)	(121,939,561)
Equity attributable to International Isotopes Inc. stockholders	987,971	1,705,972
Equity attributable to noncontrolling interest	51,643	50,169
Total equity	1,039,614	1,756,141
Total liabilities and stockholders' equity	\$ 11,799,605	\$ 11,379,265

See accompanying notes to the unaudited condensed consolidated financial statements.

## INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES

## Unaudited Condensed Consolidated Statements of Operations

	Three months ended June 30,		Six months ended June 30,	
	2017	2016	2017	2016
Sale of product	\$ 1,785,824	\$ 1,698,732	\$ 3,620,032	\$ 3,390,409
Cost of product	1,091,054	924,032	2,115,022	1,868,572
Gross profit	694,770	774,700	1,505,010	1,521,837
Operating costs and expenses:				
Salaries and contract labor	486,905	466,062	980,786	903,197
General, administrative and consulting	604,040	527,108	1,478,143	981,614
Research and development	76,982	134,409	201,652	283,017
Total operating expenses	1,167,927	1,127,579	2,660,581	2,167,828
Operating loss	(473,157)	(352,879)	(1,155,571)	(645,991)
Other income (expense):				
Other income	-	1,847	125	6,347
Equity in net income of affiliate	22,168	20,770	45,133	44,573
Interest income	662	64	1,083	157
Interest expense	(144,442)	(118,572)	(277,759)	(229,042)
Total other income (expense)	(121,612)	(95,891)	(231,418)	(177,965)
Net loss	(594,769)	(448,770)	(1,386,989)	(823,956)
Net (loss) income attributable to non-controlling interest	(7,426)	3,343	(1,474)	4,011
Net loss attributable to International Isotopes Inc.	\$ (602,195)	\$ (445,427)	\$ (1,388,463)	\$ (819,945)
Net loss per common share - basic and diluted	\$ -	\$ -	\$ -	\$ -
	406,726,706	402,481,728	406,187,935	402,408,772



Weighted average  
common shares  
outstanding

basic and diluted

See accompanying notes to the unaudited condensed consolidated financial statements.

**INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES****Unaudited Condensed Consolidated Statements of Cash Flows**

	<b>Six months ended June 30,</b>	
	<b>2017</b>	<b>2016</b>
Cash flows from operating activities:		
Net loss	\$ (1,386,989)	\$ (823,956)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Net income in equity method investment	(45,133)	(44,573)
Depreciation and amortization	110,863	115,166
Gain on disposal of property, plant and equipment	-	(4,500)
Accretion of obligation for lease disposal costs	4,701	4,608
Accretion of beneficial conversion feature and debt discount	100,614	97,762
Equity based compensation	16,819	61,556
Changes in operating assets and liabilities:		
Accounts receivable	(95,000)	327,128
Prepays and other current assets	237,637	142,925
Inventories	(354,893)	(226,237)
Unearned revenues	155,620	736,264
Accounts payable and accrued liabilities	496,024	(257,621)
Net cash (used in) provided by operating activities	(759,737)	128,522
Cash flows from investing activities:		
Restricted certificate of deposit	(996)	-
Proceeds from sale of property, plant and equipment	-	4,500
Dividends received from equity method investment	32,895	3,900
Purchase of property, plant and equipment	(20,044)	(58,531)
Net cash provided by (used in) investing activities	11,855	(50,131)
Cash flows from financing activities:		
Proceeds from sale of stock	11,969	2,134
Proceeds from sale of preferred stock	2,860,000	-
Principal payments on notes payable	(1,838,418)	(47,491)
Net cash provided by (used in) financing activities	1,033,551	(45,357)
Net increase in cash and cash equivalents	285,669	33,034
Cash and cash equivalents at beginning of period	314,520	397,955
Cash and cash equivalents at end of period	\$ 600,189	\$ 430,989
Supplemental disclosure of cash flow activities:		
Cash paid for interest	\$ 211,163	\$ 116,280
Supplemental disclosure of noncash financing and investing transactions:		
Dealer financing for the purchase of a new vehicle	\$ -	\$ 47,513

Edgar Filing: INTERNATIONAL ISOTOPES INC - Form 10-Q

Decrease in preferred stock and increase in equity for amounts allocated to warrants issued with preferred stock	\$	641,674	\$	-
Decrease in accrued interest and increase in preferred stock for conversion of debentures	\$	13,100	\$	-
Decrease in debt and increase in preferred stock for conversion of debentures	\$	1,339,900	\$	-

See accompanying notes to the unaudited condensed consolidated financial statements.

**INTERNATIONAL ISOTOPES INC. AND SUBSIDIARIES**

**Notes to Unaudited Condensed Consolidated Financial Statements**

**For the Quarter Ended June 30, 2017**

(1)

**The Company and Basis of Presentation**

International Isotopes Inc. (INIS) was incorporated in Texas in November 1995. The accompanying unaudited condensed 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 INIS and its wholly-owned subsidiaries. The unaudited condensed consolidated financial statements also include the accounts of INIS's 50% owned joint venture, TI Services, LLC (TI Services), which is headquartered in Youngstown, Ohio. The Company also owns a 24.5% interest in RadQual, LLC (RadQual), a global supplier of molecular imaging quality control devices, which is headquartered in Weare, New Hampshire. TI Services was formed with RadQual in December 2010 to distribute products and services for nuclear medicine, nuclear cardiology and Positron Emission Tomography (PET) imaging.

*Nature of Operations* INIS and its subsidiaries and joint venture (collectively, the Company, we, our or us) 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 applications. The Company also provides a host of transportation, recycling, and processing services on a contract basis for clients and holds several patents for a fluorine extraction process that it expects to use in conjunction with a proposed commercial depleted uranium de-conversion facility in Lea County, New Mexico. The Company's business consists of six major business segments: Nuclear Medicine Standards, Cobalt Products, Radiochemical Products, Fluorine Products, Radiological Services, and Transportation. The Company's headquarters and all operations, with the exception of TI Services, are located in Idaho Falls, Idaho.

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 two to three years. Accordingly, preliminary payments received on cobalt contracts, where shipment will not take place for greater than one year, have been recorded as unearned revenue and classified under current or long-term liabilities, depending upon estimated ship dates, on the Company's consolidated balance sheets. These unearned revenues will be recognized as revenue in the future period during which the cobalt shipments begin. All assets expected to be realized in cash or sold during the normal operating cycle of business are classified as current assets.

*Principles of Consolidation* The unaudited condensed consolidated financial statements include the accounts of the Company, and its wholly-owned subsidiaries and its 50%-owned joint venture, TI Services. In addition, RadQual's interest in TI Services, is included in the Company's consolidated financial statements as a non-controlling interest due to the Company's 24.5% ownership interest in RadQual. All significant intercompany accounts and transactions have been eliminated in consolidation.

*Interim Financial Information* The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with GAAP for interim financial information and pursuant to the rules and regulations of the U.S. Securities and Exchange Commission (SEC). Accordingly, the accompanying unaudited condensed consolidated financial statements do not include all of the information and notes required by GAAP for complete financial statements. In the opinion of management, all adjustments and reclassifications considered necessary in order to make the financial statements not misleading and for a fair and comparable presentation have been included and are of a normal recurring nature. Operating results for the six-month period ended June 30, 2017 are not necessarily indicative of the results that may be expected for the year ending December 31, 2017. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the Company's Annual Report on Form 10-K for the year ended December 31, 2016 filed with the SEC on March 31, 2017.

*Recent Accounting Pronouncements* In May 2017 the FASB issued ASU No. 2017-09, "Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting" (ASU 2017-079). ASU 2017-09 amends the requirements in GAAP related to accounting in changes to stock compensation awards. The guidance in ASU 2017-09 is effective for annual periods beginning after December 15, 2017, including interim periods within those fiscal years. The Company is evaluating the impact this guidance will have on its consolidated financial statements and expects the adoption will not have a significant impact on the results of operations, financial position or cash flows of the Company.

## Edgar Filing: INTERNATIONAL ISOTOPES INC - Form 10-Q

In May 2014, the FASB issued Accounting Standards Update (ASU) No. 2014-09, Revenue from Contracts with Customers (Topic 606), which supersedes all existing revenue recognition requirements, including most industry specific guidance. The new standard requires a company to recognize revenue when it transfers goods or services to customers in an amount that reflects the consideration that the company expects to receive for those goods or services. The FASB has subsequently issued the following amendments to ASU 2014-09 which have the same effective date and transition date of January 1, 2018:

In August 2015, the FASB issued ASU No. 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date, which delayed the effective date of the new standard from January 1, 2017 to January 1, 2018. The FASB also agreed to allow entities to choose to adopt the standard as of the original effective date.

In March 2016, the FASB issued ASU No. 2016-08, Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations, which clarifies the implementation guidance on principal versus agent considerations.

In April 2016, the FASB issued ASU No. 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing, which clarifies certain aspects of identifying performance obligations and licensing implementation guidance.

In May 2016, the FASB issued ASU No. 2016-12, Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients related to disclosures of remaining performance obligations, as well as other amendments to guidance on collectability, non-cash consideration and the presentation of sales and other similar taxes collected from customers.

In December 2016, the FASB issued ASU No. 2016-20, Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers, which amends certain narrow aspects of the guidance issued in ASU 2014-09 including guidance related to the disclosure of remaining performance obligations and prior-period performance obligations, as well as other amendments to the guidance on loan guarantee fees, contract costs, refund liabilities, advertising costs and the clarification of certain examples.

We are evaluating this guidance, particularly as it pertains to the Company's cobalt products segment where pre-payments are received from customers and the Company maintains future performance obligations. The Company does not at this time expect this guidance to have a material impact on its consolidated financial statements since these pre-payments are not currently recognized and are recorded as short-term and long-term liabilities on the Company's consolidated balance sheets and the revenue will be recognized in the future period during which the performance obligations are met.

In February 2016, the FASB issued ASU 2016-02, *Leases* which was issued to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The amendments in ASU 2016-02 are effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. We are in the process of completing our assessment and anticipate that ASU 2016-02 will have a material impact on our consolidated Balance Sheets, as we will record significant asset and liability balances in connection with our leased property. We are still evaluating the impact to our Consolidated Statements of Operations.

(2)

#### Current Developments and Liquidity

*Business Condition* Since inception, the Company has incurred substantial losses. During the six-month period ended June 30, 2017, the Company reported a net loss of \$1,388,463, net of non-controlling interest, and net cash used in operating activities of \$759,737. During the same period in 2016, the Company reported a net loss of \$819,945, net of non-controlling interest, and net cash provided by operating activities of \$128,522.

During the six months ended June 30, 2017, the Company continued its focus on its long-standing core business segments which consist of its radiochemical products, cobalt products, nuclear medicine standards, radiological services and transportation segments, and in particular, the pursuit of new business opportunities within those segments.

The Company expects that cash from operations, cash raised via equity financing and its current cash balance will be sufficient to fund operations for the next twelve months. Future liquidity and capital funding requirements will depend on numerous factors, including, contract manufacturing agreements, commercial relationships, technological developments, market factors, available credit, and voluntary warrant redemption by shareholders. There is no assurance that additional capital and financing will be available on acceptable terms to the Company or at all.

(3)

#### Net Loss Per Common Share - Basic and Diluted

For the six months ended June 30, 2017, the Company had 20,750,000 stock options outstanding, 47,509,172 warrants outstanding, 42,130,000 shares of Series C redeemable convertible preferred stock outstanding, and 425,000 shares of Series B redeemable convertible preferred stock outstanding that were not included in the computation of diluted loss per common share because they would be anti-dilutive.

For the six months ended June 30, 2016, the Company had 27,450,000 stock options outstanding, 27,419,172 warrants outstanding, and 425,000 shares of Series B redeemable convertible preferred stock outstanding that were not included in the computation of diluted loss per common share because they would be anti-dilutive.

(4)

#### Investment

The Company owns a 24.5% interest in RadQual, with which the Company has an exclusive manufacturing agreement for nuclear medicine products. The 24.5% ownership of RadQual has a balance of \$1,505,019 and is reported as an asset at June 30, 2017. For the six months ended June 30, 2017, member distributions from RadQual totaled \$32,895 and were recorded as a reduction of the investment. For the same period in 2016, member distributions totaled \$3,900 and were recorded as a reduction of the investment. During the six months ended June 30, 2017 and 2016, earnings allocated to the Company from RadQual totaled \$45,133 and \$44,573, respectively. These allocated earnings were recorded as equity in net income of affiliate on the Company's condensed consolidated statements of operations.

At June 30, 2017 and December 31, 2016, the Company had receivables from RadQual in the amount of \$382,183 and \$282,470, respectively, which are recorded as part of accounts receivable on the Company's condensed consolidated balance sheets. For the three months ended June 30, 2017 and 2016, the Company reported revenue from RadQual in the amount of \$555,771 and \$553,204, respectively. For the six months ended June 30, 2017 and 2016, the Company reported revenue from RadQual in the amount of \$1,088,383 and \$1,070,237, respectively. Revenue from RadQual is recorded as sale of product on the Company's condensed consolidated statements of operations.



Edgar Filing: INTERNATIONAL ISOTOPES INC - Form 10-Q

Summarized balance sheet information for the six months ended June 30, 2017 and the twelve months ended December 31, 2016, and summarized operating information for the three and six months ended June 30, 2017 and 2016 for RadQual is presented below:

RadQual LLC	<b>June 30, 2017</b>	<b>December 31, 2016</b>
Current assets	\$ 598,000	\$ 501,000
Noncurrent assets	12,000	12,000
Current liabilities	397,000	293,000
Noncurrent liabilities	-	-

	<b>For the three-months ended</b>		<b>For the six-months ended</b>	
	<b>June 30, 2017</b>	<b>2016</b>	<b>June 30, 2017</b>	<b>2016</b>
Revenue	\$ 797,000	\$ 819,000	\$ 1,657,000	\$ 1,622,000
Gross profit	209,000	231,000	472,000	458,000
Net income	66,000	101,000	185,000	185,000

On August 10, 2017, affiliates of the Company, including the Chairman of the Board and the Chief Executive Officer, acquired approximately 75% of the member units of RadQual. The Company is currently evaluating the impact that this acquisition will have on the Company's financial statements.

(5)

## Inventories

Inventories consisted of the following at June 30, 2017 and December 31, 2016:

	<b>June 30, 2017</b>	<b>December 31, 2016</b>
Raw materials	\$ 44,455	\$ 44,455
Work in process	1,781,775	1,425,056
Finished goods	4,903	6,729
	<b>\$ 1,831,133</b>	<b>\$ 1,476,240</b>

Work in process includes cobalt-60 targets that are located in the U.S. Department of Energy's (DOE) Advanced Test Reactor (ATR) located outside of Idaho Falls, Idaho. These targets are owned by the Company and contain cobalt-60 material at various stages of irradiation. The carrying value of the targets is based on accumulated irradiation and handling costs which have been allocated to each target based on the length of time the targets have been held and processed at the ATR. At June 30, 2017, this cobalt target inventory had a carrying value of \$432,623, and at December 31, 2016, the cobalt target inventory was valued at \$442,759.

Work in process also includes costs to irradiate cobalt-60 material under a contract with the DOE. This material has been placed in the ATR and the Company is making progress payments designed to coincide with the completion of the irradiation period. The Company has contracted with several customers for the sale of some of this cobalt-60 material as a bulk product and is collecting advance payments for project management, up-front handling, and irradiation charges from those customers. The remainder of cobalt under production with the DOE will be used as the raw material for cobalt sealed source manufacturing. The advance payments from customers have been recorded as unearned revenue. The revenue and the costs associated with irradiation will be recognized in the Company's financial statements as the cobalt targets are completed and start being either shipped to customers or be used as raw material in sealed source fabrication, which is expected to begin in 2018.

(6)

## Stockholders' Equity, Options and Warrants

Employee Stock Purchase Plan

The Company has an employee stock purchase plan in which employees of the Company may participate to purchase shares of common stock at a discount. During the six months ended June 30, 2017 and 2016, the Company issued

34,064 and 26,665 shares of common stock, respectively, to employees for proceeds of \$2,637 and \$2,134, respectively. All shares were issued pursuant to the Company's employee stock purchase plan. As of June 30, 2017, 785,319 shares of common stock remain available for issuance under the Company's employee stock purchase plan.

### Stock-Based Compensation Plans

*2015 Incentive Plan* - In April 2015, the Company's Board of Directors approved the International Isotopes Inc. 2015 Incentive Plan (2015 Plan) which was subsequently approved by the Company's shareholders in July 2015. The 2015 Plan provides for the grant of incentive and non-qualified stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares and units, and other stock or cash-based awards. The 2015 Plan amended and restated the Company's Amended and Restated 2006 Equity Incentive Plan (2006 Plan). The 2015 Plan authorizes the issuance of up to 60,000,000 shares of common stock, plus 11,089,967 shares authorized, but not issued under the 2006 Plan. At June 30, 2017, there were 24,422,267 shares available for issuance under the 2015 Plan.

*Employee/Director Grants* - The Company accounts for issuances of stock-based compensation to employees by recognizing, as compensation expense, the cost of employee services received in exchange for the equity awards. The compensation expense is based on the grant date fair value of the award. Stock option compensation expense is recognized over the period during which an employee is required to provide service in exchange for the award (the vesting period).

*Non-Employee Grants* - The Company accounts for its issuances of stock-based compensation to non-employees by measuring the value of any awards that were vested and non-forfeitable at their date of issuance based on the grant date fair value of the award. The non-vested portion of awards that are subject to the future performance of the counterparty are adjusted at each reporting date to their fair values based upon the then current market value of the Company's stock and other assumptions that management believes are reasonable.

Option awards outstanding as of June 30, 2017, and changes during the six months ended June 30, 2017, were as follows:

	Shares	Exercise Price	Weighted	
			Average	Remaining
			Contractual	Aggregate
<b>Fixed Options</b>				Intrinsic
			Life	Value
Outstanding at December 31, 2016	23,316,667	\$ 0.05		
Granted	-			
Exercised	(2,566,667)	\$ 0.04		\$ 108,500
Forfeited	-			
Outstanding at June 30, 2017	20,750,000	\$ 0.05	5.0	
Exercisable at June 30, 2017	20,750,000			

The intrinsic value of outstanding and exercisable shares is based on the closing price of the Company's common stock of \$0.08 per share on June 30, 2017, the last trading day of the quarter.

Total stock-based compensation expense for the six months ended June 30, 2017 and 2016 was \$16,819 and \$61,556, respectively.

During the six months ended June 30, 2017, 2,300,000 stock options were exercised under a cashless exercise. The Company withheld 1,079,412 shares to satisfy the exercise price and issued 1,220,558 shares of common stock. The options exercised were granted under a qualified plan, and accordingly, there is no income tax effect in the accompanying condensed consolidated financial statements.

During the six months ended June 30, 2017, 266,667 non-qualified stock options were exercised. The Company received \$9,333 in cash to satisfy the exercise price and issued 266,667 shares of common stock.

Pursuant to an employment agreement with its CEO, the Company issued 350,000 fully vested shares of common stock in February 2017 under the 2015 Plan. The number of shares awarded was based on a \$28,000 stock award using a price of \$0.08 per share. The employment agreement provides 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 stock grant was \$16,786, which was determined by

multiplying the number of shares awarded by the closing price of the common stock on February 28, 2017, which was \$0.08 per share. The Company withheld 140,175 shares of common stock to satisfy the employee's payroll tax obligations in connection with this issuance. The net shares issued on February 28, 2017 totaled 209,825 shares.

Warrants

Warrants outstanding at June 30, 2017, and changes during the six months ended June 30, 2017, were as follows:

<b>Warrants</b>	
Outstanding at December 31, 2016	27,419,172
Issued	20,090,000
Exercised	-
Forfeited	-
Outstanding at June 30, 2017	47,509,172

On July 27, 2017, all outstanding Class K Warrants expired. The Class K Warrants were issued in connection with 8% Convertible Debentures issued in July 2012. In February 2017, in connection with a Series C Preferred stock issuance discussed below, 17,165,000 Class M Warrants were issued, and in May 2017, 2,925,000 Class N Warrants were issued.

Preferred Stock

At June 30, 2017, 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.

On February 17, 2017, the Company entered into subscription agreements with certain investors, including two of the Company's directors, for the sale of (i) an aggregate of 3,433 shares of Series C Preferred Stock, and (ii) Class M warrants to purchase an aggregate of 17,165,000 shares of the Company's common stock (the Class M Warrants), for gross proceeds of \$3,433,000. The Series C Preferred Stock accrues dividends at a rate of 6% per annum, payable annually on February 17th of each year, commencing on February 17, 2018. The Series C Preferred Stock are convertible at the option of the investors at any time into shares of the Company's common stock at an initial conversion price equal to \$0.10 per share, subject to adjustment. At any time after February 17, 2019, if the volume-weighted average closing price of the Company's common stock over a period of 90 consecutive trading days is greater than \$0.25 per share, the Company may redeem all or any portion of the outstanding Series C Preferred Stock at the original purchase price per share plus any accrued and unpaid dividends, payable in shares of common stock. All outstanding shares of Series C Preferred Stock will be redeemed by the Company on February 17, 2022 at the original purchase price per share, payable in cash or shares of common stock, at the option of the holder. Holders of Series C Preferred Stock do not have any voting rights, except as required by law and in connection with certain events as set forth in the Statement of Designation of the Series C Preferred Stock.

The Class M Warrants are immediately exercisable at an exercise price of \$0.12 per share, subject to adjustment as set forth in the warrant, and have a term of five years.

The Company allocated the proceeds to the Series C Preferred Stock and Class M Warrants based on their relative fair value, which resulted in \$2,895,379 being allocated to the Series C Preferred Stock and \$537,621 being allocated to the Class M Warrants. The allocated Class M Warrant value was recorded as a discount to the Series C Preferred Stock and will be amortized to interest expense over the five-year life of the warrants.

The fair value of the Class M Warrants, determined using the Black-Scholes Option Pricing Model, was calculated using the following assumptions: risk-free interest rate of 1.92%, expected dividend yield of 0%, expected volatility of 66%, and an expected life of five years.

On March 24, 2017, the Company entered into an Amendment to the 8% Convertible Notes (the Amendment), pursuant to which the 8% Convertible Notes issued by the Company in July 2012 were amended to give noteholders certain additional rights. Pursuant to the Amendment, the Notes were modified to provide each holder the right, at the holder's option and exercisable prior to May 12, 2017, to convert all or any portion of the principal amount of the Notes, plus accrued but unpaid interest, into shares of Series C Preferred Stock at a conversion price of \$1,000 per share. Holders that elected to convert their Notes into Series C Preferred Stock received a Class N Warrant to purchase up to 3,750 shares of the Company's common stock for each share of Series C Preferred Stock received upon conversion of the Notes, with each Warrant having a five-year term, a cashless exercise feature, and an exercise price of \$0.10 per share of common stock. On May 12, 2017, the Company completed the retirement of \$1,835,000 of the Notes in early cash redemptions, and \$780,000 of the Notes were converted into an aggregate of 780 shares of Series C Preferred Stock and Class N Warrants to purchase an aggregate of 2,925,000 shares of the Company's common stock.

The Class N Warrants are immediately exercisable at an exercise price of \$0.10 per share, subject to adjustment as set forth in the warrant, and have a term of five years.

The Company allocated the proceeds to the Series C Preferred Stock and Class N Warrants based on their relative fair value, which resulted in \$675,947 being allocated to the Series C Preferred Stock and \$104,053 being allocated to the Class N Warrants. The allocated Class N Warrant value was recorded as a discount to the Series C Preferred Stock and will be amortized to interest expense over the five-year life of the warrants.

The fair value of the Class N Warrants, determined using the Black-Scholes Option Pricing Model, was calculated using the following assumptions: risk-free interest rate of 1.93%, expected dividend yield of 0%, expected volatility of 66%, and an expected life of five years.

(7) Debt

In July 2012, the Company entered into a securities purchase agreement with certain institutional and private investors pursuant to which it sold 8% Convertible Notes (the Notes) for an aggregate of \$3,069,900. The Notes bear interest at 8%, mature July 2017 and are unsecured. These Notes 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 under certain conditions. 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 Notes. The warrants are immediately exercisable at a price of \$0.30 per share and have a term of five years. As discussed above, on May 12, 2017, the Company completed the retirement of \$1,835,000 of the Notes in early cash redemptions, and \$780,000 of the Notes were converted into an aggregate of 780 shares of Series C Preferred Stock. At June 30, 2017, the outstanding balance of these Notes, net of debt discount, was \$254,544. The remaining Notes matured on July 27, 2017, at which time the Company paid \$255,000 in principal and \$6,623 in interest to the remaining Note holders.

In December 2013, the Company entered into a promissory note agreement with the Chairman of the Board and a major shareholder pursuant to which the Company borrowed \$500,000. The note is unsecured and bears interest at 6% per annum and was originally due September 30, 2014. At any time, the lenders may elect to have any or all of the principal plus accrued interest under the promissory note repaid in the form of our common stock at a price per share determined based upon the average closing price of the Company's common stock for the 20 days preceding the maturity or prepayment date. In connection with the promissory note, each of the lenders was issued 5,000,000 warrants to purchase shares of the Company's common stock at \$0.06 per share. The warrants are immediately exercisable. Pursuant to an amendment to the promissory note on June 30, 2014, the maturity date was extended to December 31, 2017 and each lender was granted an additional 7,500,000 warrants, which are immediately exercisable, to purchase shares of the Company's common stock at \$0.06 per share. In December 2016, the note was further modified to extend the maturity date to December 31, 2022, with all remaining terms unchanged. At June 30, 2017, the balance of the promissory note was \$500,000 and accrued interest payable on the note was \$106,734. Interest expense recorded for the three- and six-month periods ended June 30, 2017, was \$7,500 and \$15,000, respectively and interest expense recorded for the three- and six-month periods ended June 30, 2016, was \$7,500 and \$15,000, respectively.

In September 2016, the Company borrowed an aggregate of \$360,000 from the Company's Chairman of the Board of Directors and one of the Company's Directors. The note accrued interest at a rate of 6% per year, which was payable upon maturity of the note on June 30, 2017. The note was secured by company assets not otherwise encumbered. During February 2017, the \$360,000 note plus accrued interest in the amount of \$8,000, were settled in full with shares of Series C Preferred Stock. A cash payment of \$520 was made for residual interest due.

(8)

Commitments and Contingencies

Dependence on Third Parties



The production of HSA Cobalt is dependent upon the DOE, and its prime operating contractor, which controls the ATR and laboratory operations at the ATR located outside of Idaho Falls, Idaho. In October 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 with an annual 5% escalation in price. The contract term is October 1, 2014, through September 30, 2024, however, the contract may be extended beyond that date. Also, 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, for partially irradiated undelivered cobalt material, 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 products. Additionally, the majority of the radiochemical product sold by the Company is supplied to the Company through an 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 the Company's business segments involve the handling or use of radioactive material, the Company is required to have an operating license from the U.S. Nuclear Regulatory Commission (NRC) and specially trained staff to handle these materials. The Company has amended this operating license numerous times to increase the amount of material permitted within the Company's facility. Although this license does not currently restrict the volume of business operations performed or projected to be performed in the upcoming year, additional processing capabilities and license amendments could be implemented that would permit processing of other reactor-produced radioisotopes by the Company. The financial assurance required by the NRC to support this license has been provided for with a surety bond held with North American Specialty Insurance Company which is supported by a restricted money market account in the amount of \$451,627, held by Merrill Lynch.

In August 2011, the Company received land from Lea County, New Mexico, pursuant to a Project Participation Agreement (PPA), whereby the land was deeded to the Company for no monetary consideration. In return, we committed to construct a uranium de-conversion and Fluorine Extraction Process (FEP) facility on the land. In order to retain title to the property, we were to begin construction of the 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. In 2015, the Company negotiated a modification to the PPA agreement that extended the start of construction date to December 31, 2015, and the hiring milestone to December 31, 2016. Those dates were not met and the Company is currently in the process of renegotiating a second modification to the agreement to further extend those dates. If the Company is not successful in extending the performance dates in the agreement then it may, at its 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. The Company has 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.

On March 8, 2016, the Company delivered a Demand for Arbitration letter to Alpha Omega Services (AOS) of Bellflower, California. The demand letter requested arbitration before the American Arbitration Association seeking the recovery of a cash deposit made to AOS for the purchase of a shipping container plus additional amounts for lost revenue as a result of not owning the container. The demand was for approximately \$918,000 plus attorneys' fees and costs. AOS subsequently responded to the demand letter with a counter-demand denying the Company's claims and requesting \$2,000,000, plus attorney's fees. The Company has subsequently requested additional damages in the amount of \$863,806 bringing the total claim for refund and damages to \$1,673,241. Arbitration proceedings took place during a two-week period in March and April of 2017. An additional week of proceedings took place in June 2017, and one additional week of proceedings is scheduled for August 2017. The Company expects the proceedings should be concluded in August 2017 and could receive the arbitrator's decision sometime during the fourth quarter of 2017. It is not possible to predict the outcome of this matter and there is no assurance that the Company will be successful in recovering damages from its claim or defending the counter claims.

(9)

Segment Information

The Company has six reportable segments which include: Nuclear Medicine Standards, Cobalt Products, Radiochemical Products, Fluorine Products, Radiological Services, and Transportation. Information regarding the operations and assets of these reportable business segments is contained in the following table:

	<b>Three months ended June 30,</b>		<b>Six months ended June 30,</b>	
	<b>2017</b>	<b>2016</b>	<b>2017</b>	<b>2016</b>
Sale of Product				
Radiochemical				
Products	\$ 558,817	\$ 400,948	\$ 1,172,397	\$ 783,193
Cobalt Products	84,643	191,869	304,066	505,655
Nuclear Medicine				
Standards	834,698	836,858	1,643,104	1,650,017
Radiological				
Services	302,534	233,080	495,333	361,067
Fluorine Products	-	-	-	-
Transportation	5,132	35,977	5,132	90,477
Total Segments	1,785,824	1,698,732	3,620,032	3,390,409
Corporate				
revenue	-	-	-	-
Total				
Consolidated	\$ 1,785,824	\$ 1,698,732	\$ 3,620,032	\$ 3,390,409

	<b>Three months ended June 30,</b>		<b>Six months ended June 30,</b>	
	<b>2017</b>	<b>2016</b>	<b>2017</b>	<b>2016</b>
Depreciation and				
Amortization				
Radiochemical				
Products	\$ 1,609	\$ 1,750	\$ 3,218	\$ 3,498
Cobalt Products	9,084	14,000	18,854	23,691
Nuclear Medicine				
Standards	2,343	4,153	4,488	8,453
Radiological				
Services	9,886	8,755	19,434	15,716
Fluorine Products	30,751	28,012	56,846	55,960
Transportation	2,681	2,889	5,571	4,649
Total Segments	56,354	59,559	108,411	111,967
Corporate				
depreciation and				
amortization	(1,076)	1,599	2,452	3,199
Total				
Consolidated	\$ 55,278	\$ 61,158	\$ 110,863	\$ 115,166

	<b>Three months ended June 30,</b>		<b>Six months ended June 30,</b>	
	<b>2017</b>	<b>2016</b>	<b>2017</b>	<b>2016</b>
Segment Income				
(Loss)				
Radiochemical				
Products	\$ 106,998	\$ 96,373	\$ 225,153	\$ 159,471
Cobalt Products	34,933	106,289	154,994	309,654
Nuclear Medicine				
Standards	195,661	207,069	379,633	361,800
Radiological				
Services	124,298	112,233	239,824	159,827
Fluorine Products	(56,157)	(121,119)	(141,035)	(195,300)
Transportation	(18,934)	(13,604)	(43,542)	(2,742)
Total Segments	386,799	387,241	815,027	792,710

Edgar Filing: INTERNATIONAL ISOTOPES INC - Form 10-Q

Corporate loss		(988,994)		(832,669)		(2,203,490)		(1,612,655)
Net Loss	\$	(602,195)	\$	(445,427)	\$	(1,388,463)	\$	(819,945)

	<b>Three months ended June 30,</b>				<b>Six months ended June 30,</b>			
	<b>2017</b>		<b>2016</b>		<b>2017</b>		<b>2016</b>	
Expenditures for Segment Assets								
Radiochemical Products	\$	-	\$	-	\$	-	\$	-
Cobalt Products		-		-		-		-
Nuclear Medicine Standards		-		2,881		(198)		2,881
Radiological Services		10,040		36,010		10,040		40,813
Fluorine Products		6,030		-		10,202		8,719
Transportation		-		2,859		-		53,631
Total Segments		16,070		41,750		20,044		106,044
Corporate purchases		-		-		-		-
Total Consolidated	\$	16,070	\$	41,750	\$	20,044	\$	106,044

	<b>June 30,</b>		<b>December 31,</b>	
	<b>2017</b>		<b>2016</b>	
Segment Assets				
Radiochemical Products	\$	275,907	\$	267,920
Cobalt Products		1,681,160		1,414,240
Nuclear Medicine Standards		611,493		502,361
Radiological Services		160,274		171,354
Fluorine Products		5,754,983		5,801,627
Transportation		42,514		49,706
Total Segments		8,526,331		8,207,208
Corporate assets		3,273,274		3,172,057
Total Consolidated	\$	11,799,605	\$	11,379,265

(10) Subsequent Events

On July 11, 2017, following the Company's 2017 Annual Meeting of Shareholders, Ralph Richart announced his resignation as a member of the Board of Directors of the Company and as a member of the Audit Committee and the Compensation Committee, effective upon the appointment of his replacement. On August 2, 2017, Dr. Robert Atcher was appointed as a member of the Board of Directors to fill the vacancy from the resignation of Ralph Richart. Dr. Atcher was also appointed to serve on the Audit Committee and the Compensation Committee of the Board of Directors.

On August 10, 2017, affiliates of the Company, including the Chairman of the Board and the Chief Executive Officer, acquired from previous owners, all of the member units of RadQual, LLC that the Company does not own. The Company currently holds approximately 25% of the member units of RadQual, LLC. Management is currently evaluating the reporting impact that this acquisition will have on the Company's financial statements and in its public disclosures.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*This Quarterly Report on Form 10-Q 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 Quarterly Report are forward-looking statements. Words such as anticipates, believes, should, expects, future and intends and expressions identify forward-looking statements. In particular, statements regarding the future prospects of our business segments, future cash flow from operations, the Company's ability to achieve profitability, the ability to continue irradiation of cobalt targets, the business prospects and growth projection for our business segments, the FDA approval for our new sodium iodide product, and the status of our proposed uranium de-conversion facility, are forward-looking statements. 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 Quarterly Report. Certain risks and uncertainties that could cause our actual results to differ significantly from management's expectations are described in the risk factors set forth in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 filed with the Securities and Exchange Commission (SEC) on March 31, 2017, in this report and in the other reports we file with the SEC. These factors describe some but not all of the factors that could cause actual results to differ significantly from management's expectations. We undertake no obligation to update any forward-looking statements 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 reports that we file from time to time with the SEC.*

### BUSINESS OVERVIEW

International Isotopes Inc. and its subsidiaries and joint venture (collectively, the Company, we, our, or us) 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 applications. We also hold several patents for a fluorine extraction process that we intend to use in conjunction with a planned commercial depleted uranium de-conversion facility, and provide a host of transportation, recycling, and processing services on a contract basis for clients. We also own a 24.5% interest in RadQual, LLC (RadQual), a global supplier of molecular imaging quality control devices, with which we have an exclusive manufacturing agreement for nuclear imaging products. Our business consists of the following six major business segments:

*Nuclear Medicine Standards.* Our Nuclear Medicine Standards segment consists of the manufacture of sources and standards associated with Single Photon Emission Computed Tomography (SPECT) imaging. These sources are used for indication of patient positioning for SPECT imaging, SPECT camera operational testing, and calibration of dose measurement equipment. Revenue from nuclear medicine products includes sales from TI Services, LLC (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. Our nuclear medicine

standards products include flood sources, dose calibrators, rod sources, flexible and rigid rulers, spot markers, pen point markers, and a host of specialty design items. In addition to manufacturing the products themselves, we have developed a complete line of specialty packaging for the safe transportation and handling of these products.

*Cobalt Products.* Our Cobalt Products segment includes the production of bulk cobalt (cobalt-60), fabrication of cobalt capsules for radiation therapy and various industrial applications, and recycling of expended cobalt sources. We are the only company in the U.S. that provides these unique services. There has been a significant increase in regulation by the Nuclear Regulatory Commission (NRC) in recent years that has created a significant barrier to new entrants to this market.

*Radiochemical Products.* Our 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 us or are purchased in bulk form from other producers and distributed by us in customized packages and chemical forms tailored to meet customer requirements. This segment will also include our generic radiopharmaceutical and pharmaceutical products we plan to begin producing and selling pending U.S. Food and Drug Administration (FDA) approval.



We have received trademark approval for I<sup>131</sup>odine/MAX<sup>TM</sup>, our Iodine-131 oral solution, and we have submitted an abbreviated New Drug Application to the FDA for approval of this product. The FDA provided a target date for approval of the I<sup>131</sup>odine/MAX<sup>TM</sup> product of February 17, 2018, however, the FDA has granted the Company's request for an expedited review which could accelerate that approval by a month or more. Once approved we anticipate quickly starting commercial sales of the drug product which should have a significant positive impact on our revenues. We are also considering other generic drug opportunities and plan to expand the range of products offered within this business segment in the coming years.

*Fluorine Products.* We established the Fluorine Products segment in 2004 to support production and sale of the gases that we expected to be produced using our Fluorine Extraction Process (FEP) in conjunction with the operation of the proposed depleted uranium de-conversion facility in Lea County, New Mexico. Near the end of 2013, due to changes in the nuclear industry, we placed further engineering work on this project on hold. Further development activity within this segment will be deferred until market and industry conditions change to justify resuming design and construction of the facility. In the meantime, the Company expects to continue to incur some costs associated with the maintenance of licenses and other necessary project investments, and to continue to keep certain agreements in place that will support resumption of project activities at the appropriate time.

*Radiological Services.* Our Radiological Services segment consists of a wide variety of miscellaneous services such as decommissioning disused irradiation units, performing sealed source exchanges in irradiation and therapy units, and gemstone processing. We are licensed through the NRC to perform certain field service activities in connection with the U.S. Department of Energy's (DOE) 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. We designed and built a mobile hot cell unit to use in the performance of OSRP field service jobs. There has been a significant increase in the amount of work contracts obtained for these services during the second quarter and the Company expects significant growth within the segment over the last half of 2017 and continuing into 2018.

*Transportation.* Our Transportation segment was established in 2006 to provide transportation of our own products and to support our field services activities and to offer for hire transportation services of hazardous and non-hazardous cargo materials. This business segment provides us with considerable savings for the transportation of our products and produces a small revenue stream by providing transportation of products for other companies.

## RESULTS OF OPERATIONS

### *Three Months Ended June 30, 2017 Compared to Three Months Ended June 30, 2016*

Revenue for the three months ended June 30, 2017 was \$1,785,824 as compared to \$1,698,732 for the same period in 2016, an overall increase of \$87,092, or approximately 5%. This increase in revenue was largely the result of revenue increases in both the radiochemical and radiological services segments. The following table presents a period-to-period comparison of total revenue by segment for the three months ended June 30, 2017 and 2016:

	For the three-months		For the three-months			
	ended June 30,		ended June 30,			
	2017		2016		\$ change	% change
Sale of Product						
Radiochemical						
Products	\$	558,817	\$	400,948	\$ 157,869	39%
Cobalt Products		84,643		191,869	(107,226)	-56%
Nuclear Medicine						
Standards		834,698		836,858	(2,160)	0%
Radiological						
Services		302,534		233,080	69,454	30%
Fluorine Products		-		-	-	-
Transportation		5,132		35,977	(30,845)	-86%
Total Segments		1,785,824		1,698,732	\$ 87,092	5%
Corporate revenue		-		-	-	-
Total Consolidated	\$	1,785,824	\$	1,698,732	\$ 87,092	5%

Cost of sales increased to \$1,091,054 for the three months ended June 30, 2017 from \$924,032 for the same period in 2016. This is an increase of \$167,022, or approximately 18%. Gross profit for the three months ended June 30, 2017 was \$694,770, compared to \$774,700 for the same period in 2016. This represents a decrease of \$79,390, or approximately 10%. Our gross profit percentage was 39% for the three months ended June 30, 2017, and 46% for the same period in 2016. The increase in cost of sales in the three-month comparison was primarily due to our increased radiochemical products sales and related increase in the volume of material purchased to support those sales. Additionally, cost of sales for radiological services performed during the three months ended June 30, 2017,

increased \$41,899, or approximately 43%, as compared to the same three-month period in the prior year. This increase is the result of increased field service activities performed under contracts for the OSRP and related costs incurred to execute these jobs.

The following table presents cost of sales and gross profit data for each of our business segments for the three months ended June 30, 2017 and 2016:

	<b>For the three-</b>		<b>For the three-</b>	
	<b>months ended</b>		<b>months ended</b>	
	<b>% of</b>		<b>% of</b>	
	<b>Total</b>		<b>Total</b>	
	<b>Sales</b>		<b>Sales</b>	
	<b>2017</b>		<b>2016</b>	
	<b>June 30,</b>	<b>2017</b>	<b>June 30,</b>	<b>2016</b>
Total Sales	\$	1,785,824	\$	1,698,732
Cost of Sales				
Radiochemical Products	\$	415,990	23%	\$ 278,553
Cobalt Products		16,213	1%	28,583
Nuclear Medicine Standards		517,374	28%	504,566
Radiological Services		139,426	8%	97,527
Fluorine Products		-	-	-
Transportation		2,051	1%	14,803
Total Segments		1,091,054	61%	924,032
Gross Profit	\$	694,770	\$	774,700
Gross Profit %		39%		46%

Operating expense increased to \$1,167,927 for the three months ended June 30, 2017, from \$1,127,579 for the same period in 2016. This increase of \$40,348, or approximately 4%, is the result of increased in General, Administrative and Consulting costs, specifically increased legal costs incurred during the three months ended June 30, 2017 as compared to the same period in 2016. The increase legal costs pertain to our on-going arbitration proceedings, which we believe should be concluded in late 2017. Salaries and contract labor costs increased to \$486,905, for the three months ended June 30, 2017, as compared to \$466,062, for the same period in 2016. This is an increase of \$20,843, or approximately 4% and is the result of normal payroll cost increases and employee performance awards. There was no non-cash equity compensation expense to record for the three months ended June 30, 2017, and for the same period in 2016, non-cash equity compensation was \$23,002. The amount of non-cash equity compensation is calculated based on unexercised and outstanding stock options, warrants, and other equity based instruments. As these instruments become fully vested, are exercised or expire the related non-cash compensation expense will decrease. At June 30, 2017, all option awards outstanding, and other equity instruments, were fully vested and no compensation expense was recognized.

The following table presents a comparison of total operating expense for the three months ended June 30, 2017 and 2016:

	<b>For the three- months ended</b>	<b>For the three- months ended</b>		
	<b>June 30, 2017</b>	<b>June 30, 2016</b>	<b>% change</b>	<b>\$ change</b>
Operating Costs and Expenses:				
Salaries and Contract Labor	\$ 486,905	\$ 466,062	4%	\$ 20,843
General, Administrative and Consulting	604,040	527,108	15%	76,932
Research and Development	76,982	134,409	-43%	(57,427)
Total operating expenses	\$ 1,167,927	\$ 1,127,579	4%	\$ 40,348

Interest expense for the three months ended June 30, 2017 was \$144,442, compared to \$118,572 for the same period in 2016. This is an increase of \$25,870, or approximately 22%. The majority of interest expense reported is attributable to interest which is accrued and paid to holders of our convertible debt issued in July 2012. Interest expense related to this debt is allocated to general operations and to research and development based on the use of the funding proceeds. Interest payments of approximately \$123,000 are made semi-annually. The increase in interest expense reported in the period-to-period comparison is the result of non-cash interest recorded for the issuance of warrants related to preferred stock issuances that took place in February 2017 and May 2017 and that are discussed in detail below. Additionally, during the three months ended June 30, 2017, we accrued dividends payable on outstanding Series C Preferred Stock in the amount of \$83,093, which was recorded as interest expense. Interest was also paid on a loan for a vehicle purchased in May 2016.

Our net loss for the three months ended June 30, 2017 was \$602,195, compared to \$445,427, for the same period in 2016. This is an increase in loss of \$156,768, or approximately 36%, and is primarily the result of the approximate 18% increase in cost of sales, as discussed above, for the three-month period ended June 30, 2017, as compared to the same period in 2016.

*Radiochemical Products.* Revenue from the sale of radiochemical products for the three months ended June 30, 2017 was \$558,817, compared to \$400,948 for the same period in 2016. This is an increase of \$157,869, or approximately 39%. The increase in the period-to-period revenue comparison is primarily the result of a major competitor stopping the supply of sodium iodide product in October 2016 resulting in facilities turning to us for their supply of sodium iodide product.

Gross profit of radiochemical products for the three months ended June 30, 2017 was \$142,827, compared to \$122,395, for the same period in 2016, and gross profit percentages were approximately 26% and 31% for the three months ended June 30, 2017 and 2016, respectively. Cost of sales for radiochemical products increased to \$415,990 for the three months ended June 30, 2017, as compared to \$278,553 for the same period in 2016. This is an increase of \$137,437, or approximately 49%, and was primarily the result of increased sales volume and raw material purchases in this segment in the three-month comparison. Operating expense for this segment increased to \$35,829 for the three months ended June 30, 2017, compared to \$26,022 for the same period in 2016. This increase in operating expense of \$9,807, or approximately 38%, is primarily due to increased indirect labor costs and general supply costs for the three-month period ended June 30, 2017, as compared to the same period in 2016. This segment reported net income of \$106,998 for the three months ended June 30, 2017, as compared to net income of \$96,373 for the same period in 2016. The increase in net income of \$10,625, or approximately 11%, is the result of the significant increase in revenue for this segment as discussed above in the period-to-period comparison.

Within this segment, we distribute our iodine-131 as an active pharmaceutical ingredient. In September 2015, we obtained approval from the U.S. Patent and Trademark office for the trademark registration of I<sup>3</sup>odine/MAX<sup>TM</sup>. I<sup>3</sup>odine/MAX<sup>TM</sup>, a sodium iodide radiochemical product (I-131), is an oral solution or capsules for use in the treatment and diagnosis of diseases of the thyroid, thyroid cancer, and hyperthyroidism and for use in investigational and clinical trials for the treatment of breast, lung, prostate, and ovarian cancers. In November 2016, we submitted an abbreviated new drug application to the FDA for our I<sup>3</sup>odine/MAX<sup>TM</sup> sodium iodide (I-131) radiopharmaceutical product. The FDA has accepted our application and provided the Company a target approval date of February 2018. Subsequent to that, the FDA granted the Company's request for an expedited review of the product which could shorten the approval time by a month or more.

I<sup>3</sup>odine/MAX<sup>TM</sup> is the first of several potential generic drug products we plan to submit to the FDA in the coming years. We believe that the product enhancements we have made in addition to the generic drug products we plan to submit to the FDA should increase future sales in this business segment.

Cobalt Products. Revenue from the sale of cobalt products for the three months ended June 30, 2017 was \$84,643, compared to \$191,869, for the same period in 2016. This represents a decrease of \$107,226, or approximately 56%. Our cobalt sealed source manufacturing generates the majority of revenue in this segment and these sealed source sales largely depend on our ability to procure cobalt target material from the DOE's Advanced Test Reactor (ATR).

Although we have not been able to obtain high specific activity material from the ATR reactor since late 2013, periodically we are able to acquire recycled material that can be used to manufacture sealed sources for customers, and in some instances, our customers have supplied their own cobalt material for source fabrication. In March of 2017 we completed a purchase agreement for some additional cobalt material from a supplier and we expect that material will be delivered to us in late 2017 and early 2018. In the meantime, the limited availability of cobalt material will continue to directly impact our ability to generate sealed source sales in this business segment.

However, once the cobalt from the alternate supplier and the material currently undergoing irradiation at the ATR becomes available in 2018, we anticipate significantly increased sales in this business segment.

In October 2014, we entered into a ten-year agreement with the DOE for the irradiation of cobalt targets. 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 beginning in late 2018 and every year thereafter through at least 2024.

Additionally, during 2015 and 2016, we entered into cobalt-60 supply agreements with several customers. Pursuant to these contracts, we will supply bulk cobalt-60 to the customers and, in some instances, will provide on-going services with respect to the cobalt sales. The funding received under these contracts has been recorded as unearned revenue in our consolidated balance sheets. We will begin recognizing the revenue when actual sales begin in 2018. Until we are able to ship the cobalt material currently under irradiation at the ATR, we will rely on obtaining material from other sources to fulfill some of our customer demand during 2017 and 2018.

As of June 30, 2017, we continued to hold many in-progress old design cobalt targets at the ATR. We believe that the older design targets we hold at the ATR and that we report as inventory, hold significant but varying market values in excess of their current carrying values and we concluded that no impairment existed at that time. We will periodically continue to review the residual value of this cobalt material for potential impairment and make adjustments as deemed appropriate.

Gross profit for cobalt products for the three months ended June 30, 2017 was \$68,430, compared to \$163,286 for the same period in 2016. This is a decrease of \$94,856, or approximately 58% and is primarily attributable to our decreased sealed source sales for the three months ended June 30, 2017, as compared to the same period in 2016. Our gross profit percentages were approximately 81% and 85% for the three-month periods ending June 30, 2017 and 2016, respectively. Operating expense in this segment decreased to \$33,497 for the three months ended June 30, 2017, from \$56,997 for the same period in 2016. This is a decrease of \$23,500, or approximately 41% and is the result of decreased indirect labor costs and decreased training costs in the period-to-period comparison. Our net income for cobalt products was \$34,933 for the three months ended June 30, 2017, as compared to net income of \$106,289 for the same period in 2016. The decrease in net income of \$71,356, or approximately 67%, was directly attributable to decreased sealed source sales reported for the three months ended June 30, 2017, as compared to the same period in 2016.

*Nuclear Medicine Standards.* Revenue from nuclear medicine products for the three months ended June 30, 2017 was \$834,698 compared to \$836,858 for the same period in 2016. This represents a decrease in revenue of \$2,160, or less than 1% and is the result of a slight decrease in sales reported by our consolidated joint venture, TI Services. Revenue from nuclear medicine products 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 PET imaging.

The following table presents sales for the nuclear medicine standards segment for the three months ended June 30, 2017 and 2016:

	<b>For the three- months ended</b>	<b>For the three- months ended</b>	
	<b>June 30, 2017</b>	<b>June 30, 2016</b>	<b>% change</b>
Nuclear Medicine Standards Sales			

Edgar Filing: INTERNATIONAL ISOTOPES INC - Form 10-Q

Sales to RadQual	\$	555,771	\$	553,203	0%
TI Services LLC		278,927		283,655	-2%
	\$	834,698	\$	836,858	0%

Sales to RadQual increased by \$2,568, or less than 1%, for the three months ended June 30, 2017, as compared to the same period in 2016. We reported TI Services sales for the three months ended June 30, 2017 of \$278,927, as compared to \$283,655 for the same period in 2016, a decrease of \$4,728, or approximately 2%. TI Services sales of paper products used in nuclear medicine imaging, which historically has been a significant part of TI Services sales, have continued to decrease as facilities move towards electronic record-keeping. However, sales of various source products have increased during the three months ended June 30, 2017 as compared to the same period in 2016 as a result of our continued efforts working with both RadQual and TI Services on marketing strategies to boost flood source sales, and sales of other medical supplies, through TI Services.

Cost of sales for our nuclear medicine standards segment for the three months ended June 30, 2017 was \$517,374, as compared to \$504,566 for the same period in 2016. The increase in cost of sales in the period-to-period comparison is due to increased cost of scrapped material. Gross profit for our nuclear medicine standards segment for the three months ended June 30, 2017 was \$317,324, compared to \$332,292 for the same period in 2016. This is a decrease in gross profit of \$14,968, or approximately 5%. The decrease in gross profit in the period-to-period comparison is the result of the slight decrease in revenue and the slight increase in total cost of sales in the period-to-period comparison.



Operating expense for this segment for the three months ended June 30, 2017 decreased to \$121,661, from \$125,223 for the same period in 2016. This slight decrease of \$3,562, or approximately 3%, is attributable to general operating cost decreases for the three months ended June 30, 2017, as compared to the same period in 2016. Net income for this segment for the three months ended June 30, 2017 was \$195,661, compared to \$207,069 for the same period in 2016.

This is a decrease in net income of \$11,408, or approximately 6% and is the result of the slight decrease in revenue and the increase in cost of sales in the period-to-period comparison.

On August 10, 2017, affiliates of the Company, including our Chairman of the Board and our Chief Executive Officer, acquired all of the member units of RadQual that the Company does not own. The Company currently holds approximately 25% of the member units of RadQual. We are currently evaluating the reporting impact that this acquisition will have on our financial statements and in our public disclosures.

***Radiological Services.*** Our radiological services segment consists of radiological field service work and gemstone processing. Revenue from all radiological services for the three months ended June 30, 2017 was \$302,534, compared to \$233,080 for the same period in 2016, an increase of \$69,454 or approximately 30%. Radiological field services revenue in this segment was \$229,112 for the three months ended June 30, 2017, and was \$179,116 for the same period in 2016. This is an increase of \$49,996, or approximately 28%. The majority of our field service revenue is generated by the performance of activities in connection with the DOE's Orphan Source Recovery Program (OSRP), and the increase in the revenue comparison is the result of increased source recovery contracts awarded to us by the DOE's OSRP. These contracts are awarded sporadically over time and thus will continue to create fluctuations in the period-to-period comparisons in field service revenue. Revenue generated from gemstone processing was \$73,422 for the three months ended June 30, 2017, and was \$53,964 for the same period in 2016. This is an increase of \$19,458, or approximately 36%. This increase is due to the increased volume of material shipped to us for processing during the three months ended June 30, 2017 as compared to the same period in 2016. We have historically experienced these fluctuations, which are based on changes in current market demand for luxury items such as jewelry and we expect these fluctuations to continue.

The following table presents radiological services revenue for the three months ended June 30, 2017 and 2016:

	<b>For the three- months ended</b>	<b>For the three- months ended</b>	
	<b>June 30, 2017</b>	<b>June 30, 2016</b>	<b>% change</b>
Radiological Services			
Gemstone Processing	\$ 73,422	\$ 53,964	36%
Radiological Field Services	229,112	179,116	28%
	<b>\$ 302,534</b>	<b>\$ 233,080</b>	<b>30%</b>

As mentioned above, the majority of our field service revenue is generated by the performance of activities in connection with the DOE's OSRP which are awarded on a periodic basis. These activities include services to support recovery of disused sources and installation or removal of certain cobalt or cesium units. Based on the number of

orphan sources identified both in the U.S. and internationally that will need to be recovered and disposed of, we expect this source removal and installation work to increase during 2017. We have secured several new contracts with the OSRP thus far in 2017 that will be completed during the upcoming months and we expect that there will be additional OSRP work forthcoming in 2018.

In addition to the OSRP work performed, we have also submitted bids to perform work under contract with the International Atomic Energy Commission (IAEA) for the removal of disused sources in several locations in South America. In July 2017, we were awarded one of the jobs and we anticipate the award of at least one additional job sometime later in 2017.

We have designed and built two mobile hot cell units that are adaptable for use in various source recovery environments and both have been successfully demonstrated in the field. In addition, we received an amendment to our NRC license that allows us to use these hot cells to perform source removal services on a wide variety of cobalt radiation therapy units. The mobile hot cells and license amendment have been used to support continued expansion of our field service activities. Based upon contracts currently in place and the amount of anticipated future contract opportunities for this type of work, we expect that field services will be the primary source of revenue within this segment during the remainder of 2017.

Gross profit for this segment for the three months ended June 30, 2017 was \$163,107, compared to \$135,553 for the same period in 2016. The increase in gross profit of \$27,554, or approximately 20%, is the result of the increased sales in this segment for the three months ended June 30, 2017, as compared to the same period in 2016. Operating expense for the three months ended June 30, 2017 was \$38,808, as compared to \$23,321 for the same period in 2016. This increase of \$15,487, or approximately 67%, was the result of increased indirect wage expense recorded for the three-month period ended June 30, 2017 as compared to the same period in 2016.

Fluorine Products. There was no revenue to report from the fluorine products segment for the three months ended June 30, 2017, or for the same period in 2016. During the three months ended June 30, 2017, we incurred \$56,157 of expense related to items in support of future planning and design for the proposed de-conversion facility, as compared to \$121,119 for the same three-month period in 2016. The decrease of \$64,962, or approximately 54% is the result of decreased waste disposal cost and interest cost recorded in the period-to-period comparison.

We established the Fluorine Products segment in 2004 to support production and sale of the gases produced using our Fluorine Extraction Process (FEP). 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. From 2004 to 2012, we used a pilot facility to develop production processes for various high-purity products and to test methods of scaling up the size of FEP production in support of the planned de-conversion facility in Lea County, 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 we are able to secure additional de-conversion services contracts. Until such time that work resumes on the project we will limit our expenditures to essential items such as maintenance of the NRC license, land use agreements, communication with our prospective FEP product customers, and interface with the State of New Mexico and Lea County officials.

Transportation. We reported \$5,132 in revenue from transportation services for the three months ended June 30, 2017, compared to \$35,977 for the same period in 2016. We primarily use our transportation services to support the jobs performed in our cobalt products and radiological services business segments and revenue generated in this business segment is typically dependent on opportunities in these other two segments. For the three-month period ended June 30, 2017, revenue in the cobalt products segment decreased and work performed for the OSRP did not require our transportation services and consequently, revenue in our transportation segment decreased. Gross profit was \$3,081 for the three months ended June 30, 2017, compared to \$21,174 for the same period in 2016, and operating expense was \$22,015 for the three months ended June 30, 2017, compared to \$34,777 for the same period in 2016. This decrease in operating expense of \$12,762, or approximately 37%, is the result of decreased insurance cost and decreased repair and maintenance cost. Net loss reported for this segment was \$18,934 for the three months ended June 30, 2017, and net loss was \$13,604 for the same period in 2016. 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. We believe that as the anticipated growth in our other business segments occurs, particularly cobalt products and radiological services, we will see increased revenue in our transportation segment as well.

*Six Months Ended June 30, 2017 Compared to Six Months Ended June 30, 2016*

Revenue for the six-month period ended June 30, 2017 was \$3,620,032, as compared to \$3,390,409 for the same period in 2016, an increase of \$229,623, or approximately 7%. The performance of all our business segments for the six-month period is discussed in further detail below.

Edgar Filing: INTERNATIONAL ISOTOPES INC - Form 10-Q

The following table presents a period-to-period comparison of total revenue by segment for the six months ended June 30, 2017 and June 30, 2016:

	<b>For the six-</b>	<b>For the six-</b>		
	<b>months</b>	<b>months</b>		
	<b>ended</b>	<b>ended</b>		
	<b>June 30,</b>	<b>June 30,</b>	<b>\$ change</b>	<b>% change</b>
	<b>2017</b>	<b>2016</b>		
Sale of Product				
Radiochemical Products	\$ 1,172,397	\$ 783,193	\$ 389,204	50%
Cobalt Products	304,066	505,655	(201,589)	-40%
Nuclear Medicine Standards	1,643,104	1,650,017	(6,913)	-
Radiological Services	495,333	361,067	134,266	37%
Fluorine Products	-	-	-	-
Transportation	5,132	90,477	(85,345)	-94%
Total Segments	3,620,032	3,390,409	229,623	7%
Corporate revenue	-	-	-	-
Total Consolidated	\$ 3,620,032	\$ 3,390,409	\$ 229,623	7%

Gross profit for the six-month period ended June 30, 2017 was \$1,505,010, compared to \$1,521,837, for the same period in 2016. This represents a decrease of \$16,827 or approximately 1%.

The following table presents cost of sales and gross profit data for each of our business segments for the six months ended June 30, 2017 and 2016:

	<b>For the six-</b>	<b>% of</b>	<b>For the six-</b>	<b>% of</b>
	<b>months ended</b>	<b>Total</b>	<b>months ended</b>	<b>Total Sales</b>
	<b>June 30,</b>	<b>Sales</b>	<b>June 30,</b>	<b>2016</b>
	<b>2017</b>	<b>2017</b>	<b>2016</b>	<b>2016</b>
Total Sales	\$ 3,620,032		\$ 3,390,409	
Cost of Sales				
Radiochemical Products	\$ 854,164	24%	\$ 572,622	17%
Cobalt Products	60,499	2%	83,860	2%
Nuclear Medicine Standards	1,013,916	27%	1,037,076	30%
Radiological Services	183,397	5%	157,078	5%
Fluorine Products	-	0%	-	0%
Transportation	3,046	0%	17,936	1%
Total Segments	2,115,022	58%	1,868,572	55%
Gross Profit	\$ 1,505,010		\$ 1,521,837	
Gross Profit %	42%		45%	

Operating expenses were \$2,660,581 for the six-month period ended June 30, 2017, compared to \$2,167,828 for the same period in 2016. This represents an increase of \$492,753, or approximately 23%. This increase in operating expense is largely due to legal costs incurred during the six months ended June 30, 2017, and is discussed in more detail below. Salaries and contract labor expense increased by \$77,589, or approximately 9%, which is the result of salary and wage increases made during the six months ended June 30, 2017 as compared to the same period in 2016. General administrative expense increased to \$1,478,143 for the six months ending June 30, 2017 from \$981,614 for the same period in 2016. This is an increase of \$496,529, or approximately 51% and is the result of significant increased legal costs during the six months ended June 30, 2017 as compared to the same period in 2016. In March 2016, we submitted a demand for arbitration letter to Alpha Omega Services (AOS) and requested arbitration before the American Arbitration Association in an attempt to recover monies paid to AOS for a deposit on a shipping container and for lost revenue as a result of not owning the container. Arbitration proceedings took place during March and April of 2017 and again in June 2017. There is an additional arbitration hearing in late August 2017, after which the matter could be finalized with a decision expected late in 2017. Research and development expense decreased to \$201,652 for the six-month period ended June 30, 2017, from \$283,017 for the same period in 2016. This is a decrease of \$81,365 or approximately 29% and is the result of decreased costs incurred in preparing our aNDA submission to the FDA.

Edgar Filing: INTERNATIONAL ISOTOPES INC - Form 10-Q

The following table shows total operating expenses for the six-month period ended June 30, 2017 and 2016:

	For the six- months ended June 30, 2017	For the six- months ended June 30, 2016	%	\$ change
			change	
Operating Costs and Expenses:				
Salaries and Contract Labor	\$ 980,786	\$ 903,197	9%	\$ 77,589
General, Administrative and Consulting	1,478,143	981,614	51%	496,529
Research and Development	201,652	283,017	-29%	(81,365)
Total operating expenses	\$ 2,660,581	\$ 2,167,828	23%	\$ 492,753

Interest expense for the six months ended June 30, 2017 was \$277,759, compared to \$229,042 for the same period in 2016. This is an increase of \$48,717, or approximately 21% and is due to the accrual of dividends payable on our Series C Preferred stock that was issued during March and May of 2017 and is discussed in more detail below. The Series C Preferred C stock accrues dividends at a rate of 6% per year, and for the six months ended June 30, 2017, we accrued approximately \$83,000 of dividends payable which was recorded as interest expense.

Our net loss for the six-month period ended June 30, 2017, was \$1,388,463 as compared to \$819,945 for the same period in 2016. This is an increase in loss of \$568,518 or approximately 69%. This increase in net loss was largely the result of increased legal expense incurred for arbitration proceedings and increased interest expense recorded for the six months ended June 30, 2017, as compared to the same period in 2016.

**Radiochemical Products.** Revenue from the sale of radiochemical products for the six-month period ended June 30, 2017 was \$1,172,397 compared to \$783,193 for the same period in 2016. This is an increase of \$389,204, or approximately 50% and is primarily the result of a major competitor stopping the supply of sodium iodine product in October 2016 resulting in facilities turning to us for their sodium iodine product. We have obtained approval from the U.S. Patent and Trademark office for the trademark registration of I<sup>3</sup>odine/MAX<sup>TM</sup>. I<sup>3</sup>odine/MAX<sup>TM</sup>, a sodium iodide radiochemical product (I-131), that has been submitted to the FDA as a generic drug product for use in the treatment and diagnosis of diseases of the thyroid, thyroid cancer, and hyperthyroidism. Sodium iodide is also used in investigational and clinical trials for the treatment of breast, lung, prostate, and ovarian cancers. I<sup>3</sup>odine/MAX<sup>TM</sup> is the first drug product we have submitted to the FDA. We anticipate the submission of several additional generic drug products to the FDA in the future. We believe that once we obtain FDA approval and begin commercial sales of this new iodine product our sales in this segment will show significant growth.

Cost of sales was \$854,165 for the six-month period ended June 30, 2017, and \$572,622 for the same period in 2016. This is an increase of \$281,543, or approximately 49% and is directly related to the increased sodium iodide sales. Gross profit percentages on our sodium iodide product for the six months ended June 30, 2017 and 2016 were approximately 27% for both periods. We anticipate, when we launch sales of our new sodium iodide product,

Iodine/MAX™, that we will see a significant increase in our gross profit. Operating expense for this segment for the six-month period ended June 30, 2017 was \$93,080, compared to \$51,100 for the same period in 2016. This is an increase of \$41,980, or approximately 82%, and is primarily due to FDA fees incurred for the submission of an aNDA. These costs are being amortized over the period of time it is expected to take the FDA to review the application. Net income for this segment increased to \$225,153 for the six-month period ended June 30, 2017, from \$159,471 for the same period in 2016. This increase of \$65,682, or approximately 41%, is due to the increased sales reported in this segment for the six months ended June 30, 2017, as compared to the same period in 2016.

Cobalt Products. Revenues from the sale of cobalt products for the six-month period ended June 30, 2017 were \$304,066, compared to \$505,655 for the same period in 2016. This is a decrease of \$201,589, or approximately 40%, and is the result of decreased sealed source sales. Our cobalt sealed source manufacturing generates the majority of revenue in this segment and these sealed source sales largely depend on our ability to procure cobalt target material from the DOE's Advanced Test Reactor (ATR). Although we have not been able to obtain high specific activity material from the ATR reactor since late 2013, periodically we are able to acquire recycled material that can be used to manufacture sealed sources for customers, and in some instances, our customers have supplied their own cobalt material for source fabrication. During March 2017, we completed a purchase agreement for some additional cobalt material from an alternate supplier and that material should be delivered to us in late 2017. In the meantime, the limited availability of cobalt material will continue to directly impact our ability to generate sealed source sales. However, once the cobalt from the alternate supplier is delivered in late 2017 and the material currently undergoing irradiation at the ATR becomes available in late 2018, we anticipate significantly increased sales in this business segment.



As previously discussed, in October 2014 we entered into a ten-year agreement with the DOE for the irradiation of a new design of cobalt targets and, as a result of this activity, we anticipate having high specific activity cobalt available to our customers beginning in 2018 and every year thereafter through at least 2024. Until that time, we will continue to work with alternate cobalt suppliers to obtain the cobalt material to meet future short-term customer needs.

During 2015, we entered into cobalt-60 supply agreements with several customers. Under the terms of these contracts we will supply cobalt-60 to each customer and, in some cases, will provide on-going services with respect to the cobalt sales. The contracts required an initial commitment fee, plus quarterly progress payments from each customer. The amounts received under these contracts have been recorded as unearned revenue under both short-term and long-term liabilities in our financial statements.

Gross profit for cobalt products for the six-month period ended June 30, 2017 was \$243,567, as compared to \$421,795 for the same period in 2016. The decrease in gross profit is the result of the significant decrease in sales in the period-to-period comparison. Operating expense in this segment decreased to \$88,573, for the six-month period ended June 30, 2017, from \$112,142 for the same period in 2016. This is a decrease of \$23,569 or approximately 21% and is largely due to decreased indirect wages reported as well as a decrease in training costs. Net income for the six months ended June 30, 2017 was \$154,994, compared to \$309,654 for the same period in 2016. This decrease in net income of \$154,660, or approximately 50%, is the direct result of the decline in revenue in this business segment for the period ended June 30, 2017, compared to the same period in 2016.

*Nuclear Medicine Standards.* Revenue from nuclear medicine products for the six-month period ended June 30, 2017 was \$1,643,104 compared to \$1,650,017 for the same period in 2016. This represents a decrease in revenue attributable to this segment of \$6,913, or less than 1%.

The table below presents nuclear medicine standards revenue for the six-month periods ended June 30, 2017 and 2016:

	<b>For the six- months ended</b>	<b>For the six- months ended</b>	
	<b>June 30, 2017</b>	<b>June 30, 2016</b>	<b>% change</b>
Nuclear Medicine Standards			
Sales			
Sales to RadQual	\$ 1,088,383	\$ 1,070,237	2%
TI Services LLC	554,721	579,780	-4%
	\$ 1,643,104	\$ 1,650,017	0%

Our sales to RadQual for the six months ending June 30, 2017 increased by \$18,146 or approximately 2%. This increase is primarily the result of increased flood source sales. In April 2014, in collaboration with RadQual, we introduced a new lightweight imaging source, the Rad-Lite, which has been very well received by customers and continues to generate strong sales in this segment. TI Services sales dropped by \$25,059, or approximately 4%, to \$554,721 for the six-month period ending June 30, 2017 from \$579,780 for the same period in 2016. The decreased revenue is the result of the continuing drop in sales of paper products used in nuclear medicine imaging. TI Services sales of flood sources for the six-month period ended June 30, 2017 remained strong and were approximately equal to its flood source sales for the six months ended June 30, 2016. We have been working closely with RadQual, to develop new products to market through TI Services, while at the same time, implementing cost reduction measures, where appropriate, to decrease operating expense for the joint-venture.

Gross profit for the six-month period ended June 30, 2016 was \$629,188, as compared to \$612,940 for the same period in 2016, an increase of \$16,248, or approximately 3%. Operating expense for this segment for the six-month period ended June 30, 2017 decreased to \$249,555, from \$251,140 for the same period in 2016. This is an increase of \$1,585 or approximately 1%. Net income for this segment for the six-month period ended June 30, 2017, increased to \$376,633, or approximately 5%, from \$361,800 for the same six-month period in 2016.

On August 10, 2017, affiliates of the Company, including our Chairman of the Board and our Chief Executive Officer, acquired all of the member units of RadQual that the Company does not own. The Company currently holds approximately 25% of the member units of RadQual. We are currently evaluating the reporting impact that this acquisition will have on our financial statements and in our public disclosures.

***Radiological Services.*** The radiological services segment reported revenue of \$495,333 for the six-month period ended June 30, 2017 compared to \$361,067 for the same period in 2016. This is an increase of \$134,266, or approximately 37%. Revenue from field service work performed in connection with the DOE's OSRP accounts for the majority of revenue in this segment and was approximately \$226,000 for the six months ended June 30, 2017, and approximately \$174,000 for the same period in 2016. As mentioned earlier, the OSRP jobs are sporadically offered by the DOE and we expect that revenue comparisons will continue to vary from period-to-period. Gemstone processing for the six months ended June 30, 2017 was \$253,785 compared to \$170,832 for the same period in 2016. This is an increase of \$82,953, or approximately 49% and is the result of larger volumes of material shipped to us for processing during the six-month period ended June 30, 2017 as compared to the same period in 2016. We believe that these fluctuations are based on current market demand for luxury items such as jewelry and anticipate similar fluctuations to occur in future periods.

The following table presents radiological services revenue for the six-month periods ended June 30, 2017 and June 30, 2016:

	<b>For the six- months ended</b>	<b>For the six- months ended</b>	
	<b>June 30, 2017</b>	<b>June 30, 2016</b>	<b>% change</b>
Radiological Services			
Gemstone Processing	\$ 253,785	\$ 170,832	49%
Radiological Field Services	241,548	190,235	27%
	\$ 495,333	\$ 361,067	37%

Gross profit was \$311,936 for this segment for the six months ended June 30, 2017, and \$203,989 for the same period in 2016. This is an increase in gross profit of \$107,947, or approximately 53% and is the result of increased revenue reported in this business segment. Operating costs were \$72,111 and \$44,162 for the six months ended June 30, 2017 and 2016, respectively. The increase in operating expense of \$27,949, or approximately 63%, is due to increased labor costs and increased depreciation cost reported in the period-to-period comparison. Net income for the six-month period ending June 30, 2017, was \$239,824, as compared to \$159,827 for the same period in 2016.

***Fluorine Products.*** There was no revenue to report from the fluorine products segment for the six months ended June 30, 2017 or for the same period in 2016. During the six months ended June 30, 2017, we incurred \$141,035 of expense related to essential items in support of future planning and design for the proposed de-conversion facility, as compared to \$195,300 for the same three-month period in 2016. The decrease of \$54,265, or approximately 28% is the result of incurring costs for waste disposal during the six months ending June 30, 2016, whereas we reported no waste disposal expense during the same six-month period in 2017. The waste was previously generated by our FEP pilot plant, which had been stored at our Idaho facility since 2013.

We established the Fluorine Products segment in 2004 to support production and sale of the gases produced using our Fluorine Extraction Process ( FEP ), and from 2004 to 2012, we used a pilot facility to develop production processes

and test scale-up methods for various high-purity products. 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 we are able to secure additional de-conversion services contracts. We will continue to limit our expenditures to essential items such as maintenance of the NRC license, land use agreements, communication with our prospective FEP product customers, and interface with the State of New Mexico and Lea County officials.

*Transportation.* Revenue from transportation services for the six months ended June 30, 2017 was \$5,132 compared to \$90,477 for the same period in 2016. Revenue in this business segment is directly affected by the activity in our cobalt products and radiological services segments, and, as mentioned earlier, our cobalt product sales are significantly decreased due to the current scarcity of cobalt material. We believe that, as revenues in our cobalt products segment improve, and revenues in our radiological services segment continue to grow, our transportation segment revenues will increase as well. Gross profit was \$2,086 for the six months ended June 30, 2017, compared to \$72,541 for the same period in 2016. Operating expense was \$45,628 for the six months ended June 30, 2017, compared to \$79,783 for the same period in 2016. We reported \$4,500 of proceeds from the sale of a vehicle, for the six months ended June 30, 2016, and we had no other income to report for the same period in 2017. Net loss for this segment was \$43,542 and net loss was \$2,742 for the six months ended June 30, 2017, and 2016, respectively.

LIQUIDITY AND CAPITAL RESOURCES

On June 30, 2017, we had cash and cash equivalents of \$600,189 as compared to \$314,520 at December 31, 2016. This is an increase of \$285,669, and is largely the result of cash proceeds from the private placement of Series C Preferred stock and Class M Warrants in February 2017, and the conversion and redemption of the majority of our 8% Convertible Notes into Series C Preferred Stock in May of 2017, which is discussed in further detail below. For the six months ended June 30, 2017, net cash used in operating activities was \$759,737, and for the six months ended June 30, 2016, net cash provided by operating activities was \$128,522. The decrease in cash provided by operating activities in the period-to-period comparison is the combined result of cash paid for inventory, specifically irradiation fees for cobalt targets at the ATR, and a significant decrease in cash payments received on cobalt contracts which are recorded as unearned revenue. The initial terms of these cobalt contracts required a down payment plus continued quarterly progress payments from some customers. These payments are recorded as unearned revenue and will be reported as sales when the cobalt material ships, which is expected to begin in 2018.

Inventories at June 30, 2017 totaled \$1,831,133, and inventories at December 31, 2016 totaled \$1,476,240. The majority of our inventory consists of irradiated material held at the ATR located outside of Idaho Falls, Idaho. For the six months ended June 30, 2017, our target inventory accounted for approximately 88% of our work in process inventory, and includes cobalt targets of an older design as well as irradiated cobalt material under a new contract with the DOE. For the six months ended June 30, 2016, our target inventory accounted for approximately 77% of our work in process inventory. We periodically evaluate the carrying value of our older targets to determine their future market value to the Company. As of June 30, 2017, we determined that these older design targets continue to hold varying degrees of future market value to the Company and that no impairment of this inventory was necessary.

Cash provided by investing activities was \$11,855 for the six months ended June 30, 2017, and cash used in investing activities was \$50,131 for the same period in 2016. Cash used to purchase equipment was approximately \$20,000 for the six months ended June 30, 2017, as compared to approximately \$103,000 for the same period in 2016. We received \$32,985 in dividends from our investment in RadQual during the six months ended June 30, 2017, compared to \$3,900 for the same period in 2016.

Financing activities provided cash of \$1,033,551, during the six months ended June 30, 2017, and cash used for financing activities for the same period in 2016 was \$45,357. During the six months ended June 30, 2017, we received cash proceeds of \$2,860,000 from the issuance of Series C Preferred Stock and Class M Warrants in a private placement transaction whereas we reported no similar proceeds during the same period in 2016. Additionally, during the six months ended June 30, 2017, we used cash in the amount of \$1,835,000 to redeem 8% Convertible Notes outstanding, as further discussed below, and cash used for principal payments on a vehicle loan was \$3,418.

On February 17, 2017, we entered into subscription agreements with certain investors, including two of the Company's directors, for the sale of (i) an aggregate of 3,433 shares of Series C Preferred Stock, and (ii) Class M warrants to purchase an aggregate of 17,165,000 shares of the Company's common stock (Class M Warrants), for gross proceeds of \$3,433,000. The Series C Preferred Stock accrues dividends at a rate of 6% per annum, payable annually on February 17th of each year, commencing on February 17, 2018. The Series C Preferred Stock are convertible at the

option of the holder at any time into shares of the Company's common stock at an initial conversion price equal to \$0.10 per share, subject to adjustment. At any time after February 17, 2019, if the volume-weighted average closing price of the Company's common stock over a period of 90 consecutive trading days is greater than \$0.25 per share, the Company may redeem all or any portion of the outstanding Series C Preferred Stock at the original purchase price per share plus any accrued and unpaid dividends, payable in shares of common stock. All outstanding shares of Series C Preferred Stock will be redeemed by the Company on February 17, 2022 at the original purchase price per share, payable in cash or shares of common stock, at the option of the holder. Holders of Series C Preferred Stock do not have any voting rights, except as required by law and in connection with certain events as set forth in the Statement of Designation of the Series C Preferred Stock. The Class M Warrants are immediately exercisable at an exercise price of \$0.12 per share, subject to adjustment as set forth in the warrant, and have a term of five years.

As a part of the above offering, two holders of the Company's 8% Convertible Notes converted principal plus accrued interest in the amount of \$205,000 into 205 shares of Series C Preferred Stock and 205,000 Class M Warrants.

Additionally, two of the Company's directors converted outstanding notes payable and accrued interest in the amount of \$368,000 into 368 shares of Series C Preferred Stock and 1,840,000 Class M Warrants.

Additionally, on March 24, 2017, we entered into an Amendment to the 8% Convertible Notes (the Amendment), pursuant to which the 8% Convertible Notes in July 2012 were amended to give noteholders certain additional rights.

Pursuant to the Amendment, the Notes were modified to provide each holder the right, at the holder's option and exercisable prior to May 12, 2017, to convert all or any portion of the principal amount of the Notes, plus accrued but unpaid interest, into shares of Series C Preferred Stock at a conversion price of \$1,000 per share. Holders that elected to convert their Notes into Series C Preferred Stock received a Class N Warrant to purchase up to 3,750 shares of the Company's common stock for each share of Series C Preferred Stock received upon conversion of the Notes, with each Warrant having a five-year term, a cashless exercise feature, and an exercise price of \$0.10 per share of common stock. On May 12, 2017, the Company completed the retirement of \$1,835,000 of the Notes in early cash redemptions, and \$780,000 of the Notes were converted into an aggregate of 780 shares of Series C Preferred Stock and Class N Warrants to purchase an aggregate of 2,925,000 shares of the Company's common stock. The Class N Warrants are immediately exercisable at an exercise price of \$0.10 per share, subject to adjustment as set forth in the warrant, and have a term of five years.

Total increase in cash for the six-month period ended June 30, 2017, compared to December 31, 2016, was \$285,669 and was primarily the result of the private placement of the Series C Preferred Stock.

We have a long-term investment of \$1,505,019, which represents a 24.5% ownership in units of RadQual. The value of this asset is based upon the purchase price of those shares and the continued business performance of RadQual. We purchased these shares with the intent of eventually acquiring the remaining shares of RadQual and thus improve the revenues and profit margin for the nuclear medicine business segment.

We expect that cash from operations, cash raised via equity financing, and our current cash balance will be sufficient to fund operations for the next twelve months. Our future liquidity and capital funding requirements will depend on numerous factors, including, contract manufacturing agreements, commercial relationships, technological developments, market factors, available credit, and voluntary warrant redemption by shareholders. There is no assurance that additional capital and financing will be available on acceptable terms to the Company or at all.

At June 30, 2017, there were 47,509,172 outstanding warrants to purchase our common stock. Included in this number are 2,419,172 Class K Warrants issued July 27, 2012, with an exercise price of \$0.30 per share and an expiration date of July 27, 2017; 25,000,000 Class L Warrants issued September 30, 2014, with an exercise price of \$0.06 per share and an expiration date of December 23, 2018; 17,165,000 Class M Warrants issued February 17, 2017, with an exercise price of \$0.12 per share and an expiration date of February 17, 2022; and, 2,925,000 Class N Warrants issued May 12, 2017, with an exercise price of \$0.10 per share and an expiration date of May 12, 2022.

### Debt

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 Notes). The Notes bear interest at 8%, mature July 2017 and are unsecured. These Notes 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 under certain conditions. 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 8% Notes. These warrants are immediately exercisable at a price of \$0.30 per share and have a term of five years. At June 30, 2017, the outstanding balance of the 8% Convertible Notes, net of debt discount, was \$254,544. On July 27, 2017, all remaining Notes plus accrued interest were paid in cash for a total amount of \$261,623.

In March 2017, we amended the 8% Convertible Notes giving the noteholders certain additional rights (the Amendment). Pursuant to the Amendment, the Notes were modified to provide each holder the right, at the holder's option and exercisable prior to May 12, 2017, to convert all or any portion of the principal amount of the Notes, plus accrued but unpaid interest, into shares of the Company's Series C Preferred Stock at a conversion price of \$1,000 per share. Holders that elected to convert their Notes into Series C Preferred Stock received a warrant to purchase up to 3,750 shares of the Company's common stock for each share of Series C Preferred Stock received upon conversion of the Notes, with each warrant having a five-year term, a cashless exercise feature, and an exercise price of \$0.10 per share of common stock. As of June 30, 2017, \$780,000 of the Notes had been converted to 780 shares of Series C Preferred Stock and 2,925,000 Class N Warrants. Residual interest paid to Note holders who converted was \$1,515.



In addition, the 8% Convertible Notes were amended to give each holder the right, at the holder's option, to have the Company redeem part or all of the outstanding Notes for cash in an amount equal to 100% of the principal amount of the 8% Convertible Notes redeemed and all accrued but unpaid interest as of the redemption date. As a result of this amendment, \$1,835,000 of principal plus accrued interest in the amount of \$8,188 was redeemed by holders of the Notes.

On December 23, 2013, we entered into a promissory note agreement with our Chairman of the Board and one of our major shareholders (the Lenders), pursuant to which we borrowed \$500,000 from the Lenders. The loan bears interest at 6% per annum and was originally due September 30, 2014. At any time, the Lenders may elect to have any or all of the principal plus accrued interest under the promissory note repaid in the form of our common stock at a price per share determined based upon the average closing price of our common stock for the 20 days preceding the maturity or prepayment date. In connection with the promissory note, each of the Lenders was issued 5,000,000 warrants to purchase shares of our common stock at \$0.06 per share. The warrants are immediately exercisable. Pursuant to an amendment to the promissory note on June 30, 2014, the maturity date was extended to December 31, 2017 and each lender was granted an additional 7,500,000 warrants, which are immediately exercisable. In December 2016, the note was further modified to extend the maturity date to December 31, 2022, with all remaining terms unchanged. At June 30, 2017, the balance of the promissory note was \$500,000 and accrued interest on the note was \$106,734. Interest expense recorded for the three- and six-month periods ended June 30, 2017, was \$7,500 and \$15,000, respectively. Interest expense recorded for the three- and six-month periods ended June 30, 2016, was \$7,500 and \$15,000, respectively.

In March 2016, we entered into a note payable for the purchase of a vehicle. The principal amount financed was \$47,513. The term of the note is six years and the note carries an interest rate of 6.66%. Monthly payments are \$805 and the note matures April 2022. The note is secured by the vehicle.

#### OFF-BALANCE SHEET ARRANGEMENTS

As of June 30, 2017, we had no off-balance sheet arrangements or obligations.

#### **ITEM 4. 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 Securities Exchange Act of 1934, as amended (the Exchange Act), that are designed to ensure that material information relating to us is made known to the officers who certify our financial reports and to other members of senior management and

the Board of Directors. These disclosure controls and procedures are designed to ensure that information required to be disclosed in our reports that are filed or submitted under the Exchange Act are 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 an issuer in the reports that it files or submits 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 CEO and CFO, has evaluated the effectiveness, as of June 30, 2017, of our disclosure controls and procedures. Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of June 30, 2017.

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

There have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended June 30, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.



**PART II OTHER INFORMATION**

**ITEM 1. LEGAL PROCEEDINGS**

Except as set forth below, we were not a party to any legal proceedings that we believe to be material and we are not aware of any pending or threatened litigation against us that we believe could have a material adverse effect on our business, operating results, financial condition or cash flows.

On March 8, 2016, we delivered a Demand for Arbitration letter to Alpha Omega Services (AOS) of Bellflower, California. The demand letter requested arbitration before the American Arbitration Association seeking the recovery of a cash deposit made to AOS for the purchase of a shipping container plus additional amounts for lost revenue as a result of not owning the container. The demand was for approximately \$918,000 plus attorneys' fees and costs. AOS subsequently responded to the demand letter with a counter-demand. The counter-demand denied our claims against AOS and requested reimbursement from us in the amount of \$2,000,000, plus attorneys' fees and costs. We subsequently have requested additional damages in the amount of \$863,806 bringing the total claim for refund and damages to \$1,673,241. Both parties conducted two weeks of arbitration hearings in March and April 2017, a third week of hearings in June 2017, and another proceeding is scheduled to take place in late August 2017. A final decision from the arbitrator could be received late in 2017. At this time, it is not possible to predict the outcome of this matter and there is no assurance that we will be successful in recovering damages from our claim or defending the counter claims.

**ITEM 1A. RISK FACTORS**

There have been no material changes or updates to the risk factors previously disclosed in Item 1A. Risk Factors of our Annual Report on Form 10-K for the year ended December 31, 2016.

**ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS**

None.



## ITEM 6. EXHIBITS

### Exhibit

#### No.

#### Description

3.1

Restated Certificate of Formation, 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

Statement of Designation of the Series C Convertible Redeemable Preferred Stock of International Isotopes Inc. (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed on February 24, 2017).

3.3

Bylaws (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 Class N Warrant (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on May 18, 2017).

10.1

First Modification to Cobalt-60 Pellet Supply Agreement, effective April 21, 2017, between International Isotopes Inc. and Nordion (Canada) Inc., as general partner of and on behalf of Nordion Sterilization LP (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on May 10, 2017).

31.1

Certification by the Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002.\*

31.2

Certification by the Chief Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002.\*

32.1

Certification by the Chief Executive Officer furnished pursuant to 18 U.S.C. Section 1350 adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.\*\*

32.2

Certification by the Chief Financial Officer furnished pursuant to 18 U.S.C. Section 1350 adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.\*\*

101

The following financial statements, formatted in XBRL: (i) Unaudited Condensed Consolidated Balance Sheets as of June 30, 2017 and December 31, 2016, (ii) Unaudited Condensed Consolidated Statements of Operations for the six months ended June 30, 2017 and 2016, (iii) Unaudited Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2017 and 2016 and (iv) Notes to Unaudited Condensed Consolidated Financial Statements.\*

---

\* Filed herewith.

\*\* Furnished herewith.

Certain portions of the exhibit have been omitted pursuant to a confidential treatment request. Omitted information has been filed separately with the SEC.





**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: August 14, 2017

International Isotopes Inc.

By: /s/ Steve T. Laflin  
Steve T. Laflin  
President and Chief Executive  
Officer

By: /s/ Laurie McKenzie-Carter  
Laurie McKenzie-Carter  
Chief Financial Officer

**Exhibit**

**No.**

**Description**

3.1

Restated Certificate of Formation, 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

Statement of Designation of the Series C Convertible Redeemable Preferred Stock of International Isotopes Inc. (incorporated by reference to Exhibit 3.1 of the Company's Current Report on Form 8-K filed on February 24, 2017).

3.3

Bylaws (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 Class N Warrant (incorporated by reference to Exhibit 4.1 of the Company's Current Report on Form 8-K filed on May 18, 2017).

10.1

First Modification to Cobalt-60 Pellet Supply Agreement, effective April 21, 2017, between International Isotopes Inc. and Nordion (Canada) Inc., as general partner of and on behalf of Nordion Sterilization LP (incorporated by reference to Exhibit 10.1 of the Company's Current Report on Form 8-K filed on May 10, 2017).

31.1

Certification by the Chief Executive Officer under Section 302 of the Sarbanes-Oxley Act of 2002.\*

31.2

Certification by the Chief Financial Officer under Section 302 of the Sarbanes-Oxley Act of 2002.\*

32.1

Certification by the Chief Executive Officer furnished pursuant to 18 U.S.C. Section 1350 adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.\*\*

32.2

Certification by the Chief Financial Officer furnished pursuant to 18 U.S.C. Section 1350 adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.\*\*

101

The following financial statements, formatted in XBRL: (i) Unaudited Condensed Consolidated Balance Sheets as of June 30, 2017 and December 31, 2016, (ii) Unaudited Condensed Consolidated Statements of Operations for the six months ended June 30, 2017 and 2016, (iii) Unaudited Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2017 and 2016 and (iv) Notes to Unaudited Condensed Consolidated Financial Statements.\*

---

\* Filed herewith.

\*\* Furnished herewith.

Certain portions of the exhibit have been omitted pursuant to a confidential treatment request. Omitted information has been filed separately with the SEC.