BIOANALYTICAL SYSTEMS INC
Form 10-K
December 22, 2017

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 for the fiscal year ended September 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 000-23357

BIOANALYTICAL SYSTEMS, INC.

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

INDIANA	35-1345024
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
2701 KENT AVENUE WEST LAFAYETTE, INDIANA	47906
(Address of principal executive offices)	(Zip code)

(765) 463-4527

(Registrant's telephone number, including area code)

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

Securities registered pursuant to section 12(g) of the Act: Common Shares

Indicate by checkmark if the registrant is a well-known seasoned issuer, as defined by Rule 405 of the Securities Act. YES ¨ NO x

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

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 x NO ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File 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 x NO ¨

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

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

Large accelerated filer ¨ Accelerated filer ¨ Non-accelerated filer ¨ Smaller Reporting Company x
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 provided pursuant to Section 13(a) of the

Exchange Act. ¨

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

Based on the closing price on the NASDAQ Capital Market on March 31, 2017, the aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was $9,593,000. As of December 15, 2017, 8,244,201 of registrant's common shares were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement to be delivered to stockholders in connection with the Annual Meeting of Stockholders have been incorporated by reference into Part III of this report.

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PART I

This Report may contain "forward-looking statements," within the meaning of Section 27A of the Securities Act of 1933, as amended, and/or Section 21E of the Securities Exchange Act of 1934, as amended. Those statements may include, but are not limited to, discussions regarding our intent, belief or current expectations with respect to (i) our strategic plans; (ii) our future profitability, liquidity and capital resources; (iii) our capital requirements; (iv) industry trends affecting our financial condition or results of operations; (v) our sales or marketing plans; or (vi) our growth strategy. Investors in our common shares are cautioned that reliance on any forward-looking statement involves risks and uncertainties, including the risk factors beginning on page 16 of this Report. Although we believe that the assumptions on which the forward-looking statements contained herein are based are reasonable, any of those assumptions could prove inaccurate and, as a result, the forward-looking statements based upon those assumptions could be significantly different from actual results. In light of the uncertainties inherent in any forward-looking statement, the inclusion of a forward-looking statement herein should not be regarded as a representation by us that our plans and objectives will be achieved. We do not undertake any obligation to update any forward-looking statement.

(Dollar amounts in thousands, except per share data, unless otherwise noted.)

ITEM 1–BUSINESS

Recent Events

New Credit Facility

On June 23, 2017, Bioanalytical Systems, Inc. (with our subsidiaries, "We," "Our," "Us," the "Company" or "BASi") entered into a new Credit Agreement (the "Credit Agreement") with First Internet Bank of Indiana ("FIB"). The Credit Agreement includes both a term loan and a revolving line of credit and is secured by mortgages on our facilities and personal property in West Lafayette and Evansville, Indiana. We used the proceeds from the term loan to satisfy our indebtedness with Huntington Bank and terminated the related interest rate swap. We had a zero balance on our new line of credit as of September 30, 2017.

General

The Company is a contract research organization providing drug discovery and development services and analytical instruments. Our mission is to provide drug developers with superior scientific research and innovative analytical instrumentation, which saves time, saves money, and saves lives, to bring revolutionary new drugs to market quickly and safely. Our strategy is to provide services that will generate high-quality and timely data in support of new drug approval or use expansion. Our customers and partners include pharmaceutical, biotechnology, academic and government organizations. We provide innovative technologies and products and a commitment to quality to help customers and partners accelerate the development of safe and effective therapeutics and maximize the returns on their research and development investments. We offer an efficient, variable-cost alternative to our customers' internal product development programs. Outsourcing development work to reduce overhead and speed drug approvals through the Food and Drug Administration ("FDA") is an established alternative to in-house development among pharmaceutical companies. We derive our revenues from sales of our research services and drug development instruments, both of which are focused on determining drug safety and efficacy. The Company has been involved in the research of drugs to treat numerous therapeutic areas for over 40 years since its formation as a corporation organized in Indiana in 1974.

We support the preclinical and clinical development needs of researchers and clinicians for small molecule and large biomolecule drug candidates. We believe our scientists have the skills in analytical instrumentation development, chemistry, computer software development, physiology, medicine, analytical chemistry and toxicology to make the services and products we provide increasingly valuable to our current and potential customers. Our principal customers are scientists engaged in analytical chemistry, drug safety evaluation, clinical trials, drug metabolism studies, pharmacokinetics and basic research from small start-up biotechnology companies to many of the largest global pharmaceutical companies. We are committed to bringing scientific expertise, quality and speed to every drug discovery and development program to help our customers develop safe and effective life-changing medicines.

Developments within the industries we serve have a direct, and sometimes material, impact on our operations. Currently, many large pharmaceutical companies have major “block-buster” drugs that are nearing the end of their patent protections. This puts significant pressure on these companies both to develop new drugs with large market appeal, and to re-evaluate their cost structures and the time-to-market of their products. Contract research organizations (“CROs”) have benefited from these developments, as the pharmaceutical industry has turned to out-sourcing to both reduce fixed costs and to increase the speed of research and data development necessary for new drug applications. The number of significant drugs that have reached or are nearing the end of their patent protection has also benefited the generic drug industry. Generic drug companies provide a significant source of new business for CROs as they develop, test and manufacture their generic compounds.

A significant portion of innovation in the pharmaceutical industry is now being driven by biotech and small, venture capital funded drug development companies. Many of these companies are “single-molecule” entities, whose success depends on one innovative compound. While several biotech companies have reached the status of major pharmaceutical companies, the industry is still characterized by smaller entities. These developmental companies generally do not have the resources to perform much of the research within their organizations, and are therefore dependent on the CRO industry for both their research and for guidance in preparing their FDA submissions. These companies have provided significant new opportunities for the CRO industry, including us. They do, however, provide challenges in selling, as they frequently have only one product in development, which causes CROs to be unable to develop a flow of projects from a single company. These companies may expend all of their available funds and cease operations prior to fully developing a product. Additionally, the funding of these companies is subject to investment market fluctuations, which changes as the risk profiles and appetite of investors change.

Industry Overview

Drug discovery and development is the process of creating drugs for the treatment of human disease. The drug discovery process aims to identify potential drug candidates, while the drug development process involves the testing of these drug candidates in animals and humans to meet regulatory requirements. The process for researching and developing new medicines is growing in difficulty and length. On average, it takes at least ten years for a new medicine to complete the journey from initial discovery to the marketplace, with clinical trials alone taking six to seven years on average. The average cost to research and develop each successful drug is estimated to be $2.6 billion. This number incorporates the cost of failures – of the thousands and sometimes millions of compounds that may be screened and assessed early in the R&D process, only a few of which will ultimately receive approval. The overall probability of clinical success (the likelihood that a drug entering clinical testing will eventually be approved) is estimated to be less than 10%.

The drug development services industry provides independent product development services to pharmaceutical companies, biotechnology companies, and government organizations. This industry has evolved from providing limited clinical trial services in the 1970s to a full-service industry today characterized by broader relationships with customers and by service offerings that encompass the entire drug development process, including preclinical

evaluations, study design, clinical trial management, data collection, biostatistical analyses, regulatory consulting, clinical laboratory and diagnostic services, pre- and post-approval safety analysis, product registration and post-approval support.

Over the past 25 years, technological advances, as well as the emergence of the biotechnology industry, have dramatically changed the drug discovery process. New and improved technologies have evolved such as ultra-high-throughput screening, new in vitro and in vivo preclinical profiling techniques and the gene-based drug research commonly referred to as genomics. The objective of these innovations is to find more drug targets and to screen chemical compounds against targets much more quickly, with literally millions of compounds possible. This process is expected to produce many more molecules having the ability to affect biological activity. These molecules then need to be tested quickly and economically to determine their viability as potentially safe and effective drug candidates.

Trends Affecting the Drug Discovery and Development Industry

Our services and products are marketed globally to pharmaceutical, medical research and biotechnology companies and institutions (academic and governmental) engaged in drug research and development. The research services industry is highly fragmented among many niche vendors led by a small number of larger companies; the latter offer an ever-growing portfolio of start-to-finish pharmaceutical development services. Our services and products may have distinctly different customers (including separate divisions in a single large pharmaceutical company) and requirements. We believe that market trends in the pharmaceutical and biotech industries demonstrate an increasing emphasis towards outsourcing, as companies seek to maintain reduced internal resources in favor of variable models that offer high quality and higher accountability alternatives to meet their drug discovery, development and manufacturing needs. We believe that our customers are facing increased pressure to outsource facets of their research and development activities and that the following factors will increase customer outsourcing.

Accelerated Drug Development

Customers continue to require faster, more efficient, more selective development of an increasing pool of drug candidates. Consequently, our customers require fast, high-quality service in order to make well-informed decisions to quickly exclude poor candidates and speed development of successful ones. The need for additional development capacity to exploit more opportunities, accelerate development, extend market exclusivity and increase profitability drives the demand for outsourced services.

Increase in Potential New Drug Candidates

While research and development spending and the number of drug candidates are increasing, the time and cost required to develop a new drug candidate also have increased. Many pharmaceutical and biotechnology companies do not have sufficient internal resources to pursue development of all of the new drug candidates on their own. Consequently, these companies are looking to the drug discovery and development services industry for cost-effective, innovative and rapid means of developing new drugs.

Cost Pressures of Introducing New Drugs

Market forces, healthcare reform and other governmental initiatives place significant pressures on pharmaceutical and biotechnology companies to reduce drug prices. In addition, increased competition as a result of patent expiration, market acceptance of generic drugs, and governmental and privately managed care organization efforts to reduce healthcare costs have added to drug pricing pressures. The industry is responding by consolidating, streamlining operations, decentralizing internal discovery and development processes, and minimizing fixed costs. In addition, increased pressures to differentiate products and justify drug pricing are resulting in an increased focus on healthcare economics, safety monitoring and commercialization services. Moreover, pharmaceutical and biotechnology companies are attempting to increase the speed and efficiency of internal new drug discovery and development processes.

Patent Expiration

As exclusivity ends with patent expiry, drug companies defend their proprietary positions against generic competition with various patent extension strategies. Both the drug company creating these extensions and the generic competitors should provide additional opportunities for us.

Alliances

Strategic alliances allow pharmaceutical companies to share research know-how and to develop and market new drugs faster in more diverse, global markets. We believe that such alliances will lead to a greater number of potential drugs in testing, many under study by small companies lacking broad technical resources. Those small companies can add shareholder value by further developing new products through outsourcing, reducing risk for potential allies. Customers seek realistic business partnerships with their service provider in an effort to ensure that costs are controlled as their development programs progress. We have long-standing business relationships with many pharmaceutical companies and continue to offer flexible services and adapt to our customers' requirements.

Mergers and Acquisitions

Consolidation in the pharmaceutical industry is commonplace. As firms blend personnel, resources and business activities, we believe they will continue to streamline operations and minimize staffing, which may lead to more outsourcing. Consolidation may result in a disruption in the progress of drug development programs as merging companies rationalize their respective drug development pipelines.

Biotechnology Industry and Virtual Drug Company Growth

The U.S. biotechnology industry has grown rapidly over the last decade and has emerged as a key customer segment for the drug discovery and development services industry. In recent years, this industry has generated significant numbers of new drug candidates that will require development and regulatory approval. Many biotechnology drug developers do not have in-house resources to conduct development. Many new companies choose only to carry a product to a developed stage sufficient to attract a partner who will manufacture and market the drug. Because of the time and cost involved, these companies rely heavily on CROs to conduct research for their drug candidates.

Unique Technical Expertise

The increasing complexity of new drugs requires highly specialized, innovative, solution-driven research not available in all customer labs. We believe that this need for unique technical expertise will increasingly lead to outsourcing of research activity.

Data Management and Quality Expertise

Our customers and the FDA require more data, greater access to that data, consistent and auditable management of that data, and greater security and control of that data. We have made significant investments in software throughout our contract services groups to optimize efficiency and promote compliance with FDA regulations and market expectations.

Changes in the Regulatory Environment

The drug discovery and development process is heavily regulated by the FDA and its Center for Drug Evaluation and Research. Recent product safety concerns, increases in drug and general healthcare costs and the emergence of importation issues have placed the FDA and other regulatory agencies under increased scrutiny. The war on terror, the risk of global vaccine shortages and the threat of new potential pandemics have elevated the FDA's focus on research in the areas of bioterrorism and vaccine development. As a result of these and other events, drug safety, cost and availability are under intense monitoring and review by Congress, the FDA and other government agencies. In 2007, primarily in response to the FDA's handling of post market data and drug safety concerns, the FDA Act was signed into law. In addition to reauthorizing and amending various provisions that were scheduled to expire, this Act provided the FDA with regulatory authority to require drug sponsors to run post-approval studies and clinical trials

and develop and implement risk evaluation and mitigation strategies. It is also likely that additional legislation will be passed that will impact the FDA and drug development and approval process in the United States. The FDA Act, continued drug safety issues and future legislation could have a lasting and pronounced impact on the drug discovery and development industry.

Globalization of the Marketplace

Foreign firms rely on independent development companies like ours with experience in the U.S. to provide integrated services through all phases of product development and to assist in preparing complex regulatory submissions. Domestic drug firms are broadening product availability globally, demanding local regulatory approval. We believe that we and other domestic service providers with global reach, established regulatory expertise, and a broad range of integrated development services and products will benefit from this trend.

Our Solution

We address the needs of the pharmaceutical and biotechnology industries, as well as academic, non-profit and government organizations, for drug discovery and development by providing integrated products and services to help our customers maximize the return on their research and development investments. Our application of innovative technologies and products and our commitment to quality throughout the drug discovery and development process offer our customers a way to identify and develop successful drugs and devices more quickly and cost-effectively. We have obtained significant drug development expertise from more than 40 years of operation.

The Company's Role in the Drug Development Process

After a new drug candidate is identified and carried through preliminary screening, the development process for new drugs has three distinct phases.

1) The ***preclinical phase*** includes safety testing to prepare an Investigational New Drug ("IND") application for submission to the FDA. The IND must be accepted by the FDA before the drug can be tested in humans. Once a pharmacologically active molecule is fully analyzed to confirm its integrity, the initial dosage form for clinical trials is created. An analytical chemistry method is developed to enable reliable quantification. Stability and purity of the formulation are also determined.

Customers work with our preclinical services group to establish pharmacokinetics (PK), pharmacodynamics (PD) and safety testing of the new drug. These safety studies range from dose ranging studies, that involve acute safety monitoring of drugs and medical devices to chronic, multi-year oncogenicity and reproductive toxicity studies. Dose formulation analysis is provided by our pharmaceutical analysis group. Bioanalyses of blood sampled under these protocols by our bioanalytical services group provide pharmacokinetic and metabolism data that is used with the safety and toxicity information to determine the exposure required to demonstrate toxicity. A no effect level is then established for the drug and sets the basis for future dose levels in further safety testing and clinical phase I studies. Upon successful completion of preclinical safety studies, an IND submission is prepared and provided to the FDA for review prior to human clinical trials.

Many of our products are designed for use in discovery and preclinical development. The *Culex*® family of robotic automated dose delivery, blood and other biofluids sampling and physiological parameters measurement systems enable researchers to quickly and cost effectively determine PK/PD profiles of drugs in large and small animal models. The *Culex*® system allows experiments on freely moving conscious animals from early research for therapeutic target validation to lead optimization of compounds. Using the *Culex*® system, researchers are able to automatically dose and sample in-vivo to develop pharmacokinetic and pharmacodynamic profiles of drugs during early screening in rodents and other animals quickly and cost effectively. Our bioanalytical services group utilizes our depth of expertise in liquid chromatography with detection by mass spectrometry to support research, preclinical and clinical programs. We also offer bioanalytical services that utilize electrochemistry, spectrophotometric (UV/Vis or fluorescence) and Corona Discharge detection as options. We have invested heavily in robotics and mass spectrometry systems. Application of this technology allows us to rapidly develop and validate methods for new compounds and obtain information suitable for regulatory submission.

2) The ***clinical phase*** further explores the safety and efficacy of the drug candidate in humans. The sponsor conducts Phase I human clinical trials in a limited number of healthy individuals to determine safety and tolerability. Bioanalytical assays determine the availability and metabolism of the active ingredient following administration.

Expertise in method development and validation is critical, particularly for new chemical entities.

Exhaustive safety, tolerability and dosing regimens are established in sick patients in Phase II trials. Phase III clinical trials verify efficacy and safety. After successful completion of Phase III trials, the sponsor of the new drug submits a New Drug Application ("NDA") or Biologics License Application ("BLA") to the FDA requesting that the product be approved for marketing. Early manufacturing demonstrates production of the substance in accordance with FDA Good Manufacturing Practices ("GMP") guidelines. Data are compiled in an NDA, or for biotechnology products a BLA, for submission to the FDA requesting approval to market the drug or product. The bioanalytical sample count per study grows rapidly from Phase I through Phase III. Phase II and III studies may take several years to complete, supported by well-proven, consistently applied analytical methods.

Our services include evaluation of bioequivalence and bioavailability to monitor the rate and extent to which a drug is available in the body and to demonstrate that the availability is consistent between formulations. We also offer in-vitro bioequivalence testing for non-absorbed oral drugs. We offer support and testing services in clinical sample development, release and stability.

3) The ***Post-approval phase*** follows FDA approval of the NDA or BLA. This includes production and continued analytical and clinical monitoring of the drug. The post-approval phase also includes development and regulatory approval of product modifications and line extensions, including improved dosage forms. The drug manufacturer must comply with quality assurance and quality control requirements throughout production and must continue analytical and stability studies of the drug during commercial production to continue to validate production processes and confirm product shelf life. Samples from each manufactured batch must be tested prior to release of the batch for distribution to the public.

We also provide services during the post-approval phase, including bioequivalence studies of new formulations, line extensions, new disease indications and drug interaction studies. Our ability to offer GMP electrochemical detection services has provided increased business opportunities for release testing.

Increases in our services offerings have resulted in our ability to provide a broader range of services to our customers, often using combined services of several disciplines to address customer needs. Our ability to solve customer problems by combining our knowledge base, services and products has been a factor in our selection by major pharmaceutical companies to assist in several preclinical through post-approval phases.

Company Services and Products

Overview

We focus on developing innovative services and products that increase efficiency and reduce costs associated with taking new drugs to market. We operate in two business segments – contract research services and research products, both of which address the bioanalytical, preclinical, and clinical research needs of drug developers. Both segments arose out of our expertise in a number of core technologies designed to quantify trace chemicals in complex matrices.

Contract Research Services

The contract research services segment provides screening and pharmacological testing, preclinical safety testing, formulation development, regulatory compliance and quality control testing. Revenues from the contract research services segment were $20.2 million for fiscal 2017. The following is a description of the services provided by our contract research services segment:

Product Characterization, Method Development and Validation*:* Analytical methods, primarily performed in West Lafayette, Indiana, determine potency, purity, chemical composition, structure and physical properties of a compound. Methods are validated to ensure that data generated are accurate, precise, reproducible and reliable and are used consistently throughout the drug development process and in later product support.

Bioanalytical Testing*:* We analyze specimens from preclinical and clinical trials to measure drug and metabolite concentrations in complex biological matrices. Bioanalysis is performed at our facilities in West Lafayette, Indiana.

Stability Testing*:* We test stability of drug substances and formulated drug products and maintain secure storage facilities in West Lafayette, Indiana to establish and confirm product purity, potency and shelf life. We have validated controlled-climate GMP (Good Manufacturing Practices) systems in place, and the testing capability to complete most stability programs.

In Vivo Pharmacology*:* We provide preclinical *in vivo* sampling services for the continuous monitoring of chemical changes in life, in particular, how a drug enters, travels through, and is metabolized in living systems. Those services are performed in customized facilities in West Lafayette and Evansville, Indiana using our robotic *Culex*® APS (Automated Pharmacology System).

Preclinical and Pathology Services*:* We provide pharmacokinetic and safety testing in studies ranging from acute safety monitoring of drugs and medical devices to chronic, multi-year oncogenicity studies in our Evansville, Indiana site.

Archiving Services: We provide climate-controlled archiving services for our customers' data and samples at our facilities in West Lafayette and Evansville, Indiana.

Research Products

We focus our products business on expediting preclinical screening of developmental drugs. We compete in small niches of the multibillion dollar analytical instrument industry. The products business targets unique niches in life science research. We design, develop, manufacture and market state-of-the-art:

- *In vivo* sampling systems and accessories (including disposables, training and systems qualification)
- Physiology monitoring tools
- Liquid chromatography and electrochemistry instruments platforms

Revenues for our products segment were $4.0 million for fiscal 2017. We offer two (2) principal product lines: Analytical Products and In vivo Sampling Products. In addition, we continue to service our Vetronics' Products line. The following is a brief description of the products offered:

- ***Analytical Products:*** Analytical products consist of our liquid chromatographic and electrochemical instruments with associated accessories. The critical component of these products is the Epsilon® electrochemical platform. This platform incorporates all the hardware capabilities needed for most electrochemical experiments but can be modified through software development. The market for our analytical products is comprised principally of academic institutions and industrial research companies.
- ***In vivo Sampling Products:*** *In vivo* sampling products consist of the *Culex*® family of automated *in vivo* sampling and dosing instruments. These instruments are used by pharmaceutical researchers to dose animals and collect biological samples (blood, bile, urine, microdialysate, feces or any bio-fluid) from the animals. Since dosing and sample collections are automated, animals are not manually handled, reducing stress on the animals and producing more representative pharmacological data. Behavior and other physiological parameters can also be monitored simultaneously. Compared to manual methods, the *Culex*® products offer significant reduction in test model use and comparable reduction in labor. The line also includes *in vivo* sampling devices sold to drug developers and medical research centers to assist in the study of a number of medical conditions including stroke, depression, Alzheimer's and Parkinson's diseases, diabetes and osteoporosis.
- ***Vetronics' Products:*** Vetronics' products consist of instruments and related software to monitor and diagnose cardiac function (electro-cardiogram) and measure other vital physiological parameters primarily in cats and dogs in veterinary clinics. In late fiscal 2014, we began shifting our market focus and no longer actively market the Vetronics' product offering. Through fiscal 2017, we continued to service units in the field. Beginning in fiscal 2018, we are winding down that support with an ending date in June of 2018.

Customers

We have regularly provided our services and/or products to most of the top 25 pharmaceutical companies in the world, as ranked by the number of research and development projects. Approximately 10% of our revenues were generated from customers outside of North America in fiscal 2017 and 2016, respectively.

We balance our business development effort between large pharmaceutical developers and smaller drug development companies.

In fiscal 2017 our Services group continued its presence at several important existing customers. In fiscal 2017, one customer accounted for approximately 13.1% of total sales and 5.2% of total trade accounts receivable at September 30, 2017. In fiscal 2016 this customer accounted for approximately 14.0% of total sales and 13.2% of total trade accounts receivable at September 30, 2016. The customer discussed is included in our Services segment. There can be no assurance that our business will move away from dependence upon a limited number of customer relationships.

Sales and Marketing

We promote our services through concentrated business development efforts, scientist-to-scientist communications and centralized corporate marketing programs and social media to both large and small pharmaceutical and biotechnology companies, as well as research institutions. We recognize that our growth and customer satisfaction depend upon our ability to continually improve and create new customer relationships.

Our sales and global marketing initiatives include integrated campaigns designed to help differentiate and promote our products and services. Through trade events, online and print advertising in trade publications, direct communication, newsletters, social media and our website, we provide our perspective on current industry challenges or developments to create an ongoing dialogue with our customers and to promote our industry expertise, quality, technology and innovation. We reinforce key messages and selling points through customer presentations, corporate material and at trade events and industry conferences.

We encourage and sponsor the participation of our scientific and technical personnel in a variety of professional endeavors, including via speaking engagements, the presentation of papers at national and international professional trade meetings and the publication of scientific articles in medical and pharmaceutical journals. Through these endeavors we seek to further our reputation for professional excellence.

As of September 30, 2017, in addition to our leadership team and scientists, we had 4 employees on our global sales and marketing staff. We have a network of 16 established distributors covering Japan, the Pacific Basin, South America, the Middle East, India, South Africa and Eastern Europe. All of our distributor relationships are managed from the corporate headquarters in West Lafayette, Indiana.

Contractual Arrangements

Our service contracts typically establish an estimated fee to be paid for identified services. In most cases, some percentage of the contract costs is paid in advance. While we are performing a contract, customers often adjust the scope of services to be provided based on interim project results. Fees are adjusted accordingly. Generally, our fee-for-service contracts are terminable by the customer upon written notice of 30 days or less for a variety of reasons, including the customer’s decision to forego a particular study, the failure of product prototypes to satisfy safety requirements, and unexpected or undesired results of product testing. Cancellation or delay of ongoing contracts may result in fluctuations in our quarterly and annual results. We are generally able to recover, at minimum, our invested costs when contracts are terminated.

Our products business offers both annual and multi-year service and maintenance agreements on many of our product lines.

Competition

Services

We compete with in-house research, development, quality control and other support service departments of pharmaceutical and biotechnology companies as well as other Contract Research Organizations ("CROs") that compete in this industry. Several of our competitors have significantly greater financial resources than we do. The largest CRO competitors offering similar research services include:

- Covance, Inc. now part of LabCorp;
- Pharmaceutical Product Development, Inc.;
- Charles River Laboratories, Inc.; and
- Quintiles Transnational Holdings, Inc.

CROs generally compete on:

- regulatory compliance record;
- reputation for on-time quality performance;
- quality systems;

- previous experience;
- medical and scientific expertise in specific therapeutic areas;
- scientist-to-scientist relationships;
- quality of contract research;
- financial viability;
- database management;
- statistical and regulatory services;
- ability to recruit investigators;
- ability to integrate information technology with systems to optimize research efficiency;
- quality of facilities;
- international presence with strategically located facilities; and
- price.

Products

Though many global analytical instruments competitors exist, we have an extensive, long-standing network of customers who are repeat buyers and recommend our products. In contrast, there are few competitors for our *in vivo* sampling products. The primary market is large pharmaceutical research departments and academic research institutions. Our differentiators are high quality, flexibility to meet customers' specific needs and superior technical support and service. We provide equipment that enables our customers to attain premium scientific laboratory information on a reasonable operating investment. As customers' needs constantly change, we continually refine our products and develop new products which meet our operating objectives.

Government Regulation

We are subject to various regulatory requirements designed to ensure the quality and integrity of our data and products. These regulations are promulgated primarily under the Federal Food, Drug and Cosmetic Act, and include Good Laboratory Practice ("GLP"), Good Manufacturing Practice ("GMP"), Bioequivalence regulations ("BE") and Good Clinical Practice ("GCP") guidelines administered by the FDA. The standards of GLP, GMP, BE and GCP are required by the FDA and by similar regulatory authorities around the world. These requirements demand rigorous attention to employee training; detailed documentation; equipment validation; careful tracking of changes and routine auditing of compliance. Noncompliance with these standards could result in disqualification of project data collected by the Company. Material violations of GLP, GMP, BE or GCP regulations could result in regulatory sanctions and, in severe cases, could also result in a discontinuance of selected operations. Since our formation, we have been inspected, on a routine basis, by the FDA seventeen times. The FDA has inspected our West Lafayette location twelve times and our Evansville location five times. Of the seventeen FDA inspections, eleven were without findings. Where the FDA had findings, which have not been significant to our operations, we have taken actions to address the findings and the FDA has informed us that it deemed the actions taken as acceptable.

We are also subject to, and required to comply with, regulations from the Environmental Protection Agency ("EPA"). The EPA has inspected the West Lafayette location twice. Both inspections ended without findings.

We have not experienced any significant problems to date in complying with the regulations of the FDA and EPA and do not believe that any existing or proposed regulations will require material capital expenditures or changes in our method of operation.

Analytical Services

Laboratories that provide information included in INDs, NDAs and BLAs must conform to regulatory requirements that are designed to ensure the quality and integrity of the testing process. Most of our contract research services are subject to government standards for laboratory practices that are embodied in regulations for GLP, GMP, BE and GCP. The FDA, EPA and other regulatory authorities require that test results submitted to such authorities be based on studies conducted in accordance with the regulations listed above. These regulations and associated guidelines are set out to help the researcher perform work in compliance with a pre-established plan and standardized procedures. These requirements include but are not restricted to:

- Resources – organization, personnel, facilities and equipment;
- Rules – protocols and written procedures;
- Characterization – test items and test systems;
- Documentation – raw data, final report and archives; and
- Quality assurance unit – formalized internal audit function.

We must also maintain reports for each study for specified periods for auditing by the study sponsor and by the FDA or similar regulatory authorities in other parts of the world. Noncompliance with these regulations can result in the disqualification of data collected during the preclinical trial.

Preclinical Services

Our animal research facilities are subject to a variety of federal and state laws and regulations, including The Animal Welfare Act and the rules and regulations enforced by the United States Department of Agriculture ("USDA") and the National Institutes of Health ("NIH"). These regulations establish the standards for the humane treatment, care and handling of animals by dealers and research facilities. Our animal research facilities maintain detailed standard operating procedures and other documentation necessary to comply with applicable regulations for the humane treatment of the animals in our custody. In addition to being licensed by the USDA as a research facility, we are also accredited by the Association for Assessment and Accreditation of Laboratory Animal Care International and have registered assurance with the NIH.

Quality Assurance and Information Technology

To promote compliance with applicable regulations, we have established quality assurance programs at our facilities, which include auditing of test data, personnel training, review of procedures and regular inspection of facilities. In addition, FDA regulations and guidelines serve as a basis for our Standard Operating Procedures ("SOPs") where applicable. On an ongoing basis, we endeavor to standardize SOPs across all relevant operations. We have both developed and purchased software to ensure compliant documentation, handling and reporting of laboratory-generated study data.

We use 21 CFR Part 11 (FDA regulations on electronic records and electronic signatures that define the criteria under which electronic records and electronic signatures are considered to be trustworthy, reliable and equivalent to paper records). Our contract research operations were compliant with applicable U.S. FDA regulations (including 21 CFR Part 11) in our analytical, bioanalytical, toxicology, laboratory information management, and document management systems. Systems compliant with 21 CFR Part 11 were formally validated and released for use in regulated studies.

We manage our business systems through the use of an Enterprise Resource Planning ("ERP") system. We are continually refining and adjusting our ERP system to improve efficiency, provide better management tools and address changes in our business. These changes are appropriately documented and tested before implementation. We also test these systems in connection with management's annual review of our internal control systems. Management's assessment and report on disclosure controls and procedures and internal controls over financial reporting is included in Item 9A.

Controlled, Hazardous, and Environmentally Threatening Substances

Some of our development and testing activities are subject to the Controlled Substances Act administered by the Drug Enforcement Agency ("DEA"), which strictly regulates all narcotic and habit-forming substances. We maintain restricted-access facilities and heightened control procedures for projects involving such substances due to the level of security and other controls required by the DEA. In addition, we are subject to other federal and state regulations concerning such matters as occupational safety and health and protection of the environment.

Our laboratories are subject to licensing and regulation under federal, state and local laws relating to hazard communication and employee right-to-know regulations, the handling and disposal of medical specimens and hazardous waste, as well as the safety and health of laboratory employees. All of our laboratories are subject to applicable federal and state laws and regulations relating to the storage and disposal of laboratory specimens, including regulations of the Environmental Protection Agency, the Department of Transportation, the National Fire Protection Agency and the Resource Conservation and Recovery Act. Although we believe that we are currently in compliance in all material respects with such federal, state and local laws, failure to comply could subject us to denial of the right to conduct business, fines, criminal penalties and other enforcement actions.

The regulations of the U.S. Department of Transportation, the U.S. Public Health Service and the U.S. Postal Service apply to the surface and air transportation of laboratory specimens. Our laboratories also comply with the International Air Transport Association regulations which govern international shipments of laboratory specimens. Furthermore, when materials are sent to a foreign country, the transportation of such materials becomes subject to the laws, rules and regulations of such foreign country.

Safety

In addition to comprehensive regulation of safety in the workplace, the Occupational Safety and Health Administration has established extensive requirements relating to workplace safety for health care employers whose workers may be exposed to blood-borne pathogens such as HIV and the hepatitis B virus. These regulations, among other things, require work practice controls, protective clothing and equipment, training, medical follow-up, vaccinations and other measures designed to minimize exposure to chemicals, and transmission of blood-borne and airborne pathogens. Relevant employees receive initial and periodic training focusing on compliance with applicable hazardous materials regulations and health and safety guidelines.

HIPAA

Under the Health Insurance Portability and Accountability Act of 1996 (“HIPAA”), the U.S. Department of Health and Human Services regulates the disclosure of confidential medical information in the United States. We have had a global privacy policy in place since January 2001 and believe that we are in compliance with HIPAA and current European Union requirements regarding confidential medical information. We continue to monitor our compliance with these regulations, and we intend to take appropriate steps to ensure compliance as these and other privacy regulations are revised or additional regulations come into effect.

Product Liability and Insurance

We maintain product liability and professional errors and omissions liability insurance, providing coverage on a claims-made basis. Additionally, in certain circumstances, we seek to manage our liability risk through contractual provisions to be indemnified by the customer or covered by the customer's liability insurance policies. Also, in certain types of engagements, we seek to limit our contractual liability to customers to the amount of fees received. Our customer contractual arrangements are subject to negotiation, and the terms and scope of indemnification, liability limitation and insurance coverage vary by customer and project.

Research and Development

In fiscal 2017 and 2016, we spent $465 and $496, respectively, on research and development. Separate from our contract research services business, we maintain applications research and development to enhance our products business. Expenditures cover hardware and software engineering costs, laboratory supplies, labor, prototype development and laboratory demonstrations of new products and applications for those products.

Intellectual Property

We believe that our patents, trademarks, copyrights and other proprietary rights are important to our business. Accordingly, we actively seek protection for those rights both in the United States and abroad. Where we deem it to be an appropriate course of action, we will vigorously prosecute patent infringements. The loss of any one or more of our patents, trademarks, copyrights or other proprietary rights could be material to our consolidated revenues or earnings.

We currently hold four U.S. federally registered trademarks. We also have two issued U.S. patents on the Dried Blood Spot (DBS) sampling card for the *Culex*® Automated Blood Sampling Instrumentation. There are also pending international patent applications for this technology in Japan, Canada, and Europe. Additionally, we have three issued U.S. patents for the No Blood Waste technology for the *Culex*® instrument. There are thirteen issued international patents for this technology in Europe, Japan and Canada. There are two additional issued U.S. patents and fifteen issued international patents in Germany, Denmark, Europe, Spain, France, Great Britain, Japan, Sweden, and Switzerland relating to the Raturn® technology which can be used with the *Culex*® system; two issued U.S. patents and one issued Canadian patent relating to pinch valve technology; and thirteen pending international patent applications in Canada, Japan and Europe relating to a tube assembly system that could potentially be used in the *Culex*® system.

Our issued patents are protected for durations ranging from October of 2018 to August of 2037. In addition to these formal intellectual property rights, we rely on trade secrets, unpatented know-how and continuing applications research which we seek to protect through means of reasonable business procedures, such as confidentiality agreements.

Raw Materials

There are no specialized raw materials that are particularly essential to our business. We have a variety of alternative suppliers for the components in our products.

Employees

At September 30, 2017, we had 151 full-time employees and 4 part-time employees. All employees enter into confidentiality agreements intended to protect our proprietary information. We believe that our relations with our employees are good. None of our employees are represented by a labor union. Our performance depends on our ability to attract and retain qualified professional, scientific and technical staff. The level of competition among employers for skilled personnel is high. We believe that our employee benefit plans enhance employee morale, professional commitment and work productivity and provide an incentive for employees to remain with the Company.

Executive Officers of the Registrant

The following table illustrates information concerning the persons who currently serve as our executive officers. Officers are elected annually at the annual meeting of the board of directors.

Name	Age	Position
Jill Blumhoff	41	Chief Financial Officer, Vice President-Finance
Philip A. Downing	47	Senior Vice President, Preclinical Services
Dr. James S. Bourdage	65	Vice President, Bioanalytical Operations

Jill Blumhoff joined the Company as Assistant Controller on October 7, 2007 and thereafter was promoted to positions of greater responsibility in the Accounting and Finance area including Director of Financial Reporting and Director of Finance and IT until reaching her present position of Chief Financial Officer and Vice President of Finance on May 11, 2016. She has been responsible for all aspects of financial reporting and disclosure as well as leading the Company’s efforts in building the financial support structure at BASi. Ms. Blumhoff held various roles of increasing levels of responsibility in financial reporting and analysis at Wabash National Corporation after beginning her career at Ernst & Young LLP. Ms. Blumhoff received a Bachelor of Science degree in accounting from the University of the Illinois at Urbana-Champaign in 1998.

Philip A. Downing joined the Company as an Analytical Chemist on November 3, 1997 and has over 22 years of pharmaceutical experience in drug discovery, toxicology/non-clinical and clinical research. Traditionally trained as a bioanalytical chemist, Mr. Downing joined BASi as an analytical chemist in 1997, rapidly moving into leadership positions such as Director of Analytical Services, General Manager, and Sr. Director of Preclinical until reaching his present position as Vice President of Preclinical Services in March of 2015. Prior to joining BASi, Mr. Downing worked at GFi Pharmaceuticals (now Covance Labs – Clinical Division) as an Analytical Scientist and RSO designing and validating radiolabeled and non-radiolabeled assays used to support clinical ADME studies. Mr. Downing earned a Bachelor's Degree in Chemistry and Biology from Indiana University and is a member of the Society of Toxicology, American College of Toxicology and the American Chemical Society.

James S. Bourdage, Ph.D., joined the Company as Vice President of Bioanalytical Operations on June 2, 2014. Prior to joining the Company, Dr. Bourdage served as Executive Director Biopharmaceutical CMC Solutions at Covance Inc., Greenfield, Indiana, beginning in 2011, where he was responsible for the U.S. Biotechnology CMC operation of this $2.4 billion drug development services organization. From 2009 to 2011, Dr. Bourdage was Senior Director, Bioanalytical Sciences, at Pharmathene, Inc., Annapolis, Maryland, a biodefense. From 2003 to 2009, Dr. Bourdage was Global Research Advisor and Team Leader, Laboratory for Experimental Medicine at Eli Lilly Co., Indianapolis, where his responsibilities included oversight of biotherapeutic immunogenicity and biomarker assay development to support global clinical trials. Previously, he was Senior Research Scientist, Drug Absorption and Transport at Pharmacia (Upjohn), Kalamazoo, Michigan, where he received the Upjohn Corporate Special Recognition Award in 1992 and the Quality Control Achievement Award in 1993. Dr. Bourdage received a Ph.D. in Immunochemistry from the University of Illinois in 1979. He is a member of the American Society of Clinical Pathologists and the American Association of Pharmaceutical Scientists.

Investor Information

We file various reports with, or furnish them to, the Securities and Exchange Commission (the "SEC"), including our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to such reports. These reports are available free of charge upon written request or by visiting www.BASinc.com/invest. Inquiries from shareholders, security analysts, portfolio managers, registered representatives and other interested parties including media inquiries should be directed to:

BASi Investor Relations,

Attn: Jill Blumhoff

2701 Kent Avenue, West Lafayette, IN 47906 USA

Phone 765-463-4527, Fax 765-497-1102, ir@basinc.com

ITEM 1A–RISK FACTORS

Risks Related to Our Business

Our business is subject to many risks and uncertainties, which may affect our future financial performance. If any of the events or circumstances described below occur, our business and financial performance could be adversely affected, our actual results could differ materially from our expectations and the market value of our stock could decline. The risks and uncertainties discussed below are not the only ones we face. There may be additional risks and uncertainties not currently known to us or that we currently do not believe are material that may adversely affect our business and financial performance.

The loss of our key personnel could adversely affect our business.

Our success depends to a significant extent upon the efforts of our senior management team and other key personnel. The loss of the services of such personnel could adversely affect our business. Also, because of the nature of our business, our success is dependent upon our ability to attract, train, manage and retain technologically qualified personnel. There is substantial competition for qualified personnel, and an inability to recruit or retain qualified personnel may impact our ability to grow our business and compete effectively in our industry.

At the end of fiscal 2016, we experienced turnover in management, including the resignation of our Chief Executive Officer and President in November of 2016. Our Board of Directors continues to work to identify a successor Chief Executive Officer and President, but a successor may not be named in a timely manner, if at all.

We rely on third parties for important services.

We have historically depended on third parties to provide us with services critical to our business, including without limitation transportation services. In addition, in September 2016, the Board of Directors engaged, and we continue to rely on the services of, a financial consultant. The failure of third parties to adequately provide needed services or our determination to forgo non-critical services, could have a material adverse effect on our business.

We have experienced periods of losses on our operating activities.

Prior to fiscal 2017, we have experienced periods of financial losses. Our overall strategy includes increasing revenue on a consistent basis and controlling our operating expenses while investing and adding complementary services. We have concentrated our efforts on enhancing our business development program as well as ongoing Company-wide efficiency activities intended to increase productivity and streamline our operations. Our efforts may not result in profitability, or if our efforts result in profits, such profits may not continue for any meaningful period of time.

A reduction in research and development budgets at pharmaceutical and biotechnology companies may adversely affect our business.

Our customers include researchers at pharmaceutical and biotechnology companies. Our ability to continue to grow and win new business is dependent in large part upon the ability and willingness of the pharmaceutical and biotechnology industries to continue to spend on research and development and to purchase the products and outsource the services we provide. Fluctuations in the research and development budgets of these researchers and their organizations could have a significant effect on the demand for our products and services. Research and development budgets fluctuate due to changes in available resources, mergers of pharmaceutical and biotechnology companies, spending priorities and institutional budgetary policies. Our business could be adversely affected by any significant decrease in life sciences research and development expenditures by pharmaceutical and biotechnology companies. Economic factors and industry trends that affect our customers in these industries also affect our business.

We rely on a limited number of key customers, the importance of which may vary dramatically from year to year, and a loss of one or more of these key customers may adversely affect our operating results.

Eight customers accounted for approximately 49% of our total revenue in fiscal 2017 and six customers accounted for approximately 38% of our total revenues in fiscal 2016. The loss of a significant amount of business from one of our major customers would materially and adversely affect our results of operations until such time, if ever, as we are able to replace the lost business. Significant customers or projects in any one period may not continue to be significant customers or projects in other periods. In any given year, there is a possibility that a single pharmaceutical company may account for a significant percentage of our total revenue or that our business may be dependent on one or more large projects. Since we do not have long-term contracts with most of our customers, the importance of a single customer may vary dramatically from year to year as projects end and new projects begin. To the extent that we are dependent on any single customer, we are subject to the risks faced by that customer if such risks impede the customer’s ability to stay in business and make timely payments to us.

The majority of our customers' contracts can be terminated upon short notice.

Most of our contracts for CRO services are terminable by the customer upon 30 days' notice. Customers terminate or delay their contracts for a variety of reasons, including but not limited to:

- products being tested fail to satisfy safety requirements;
- products having undesired clinical results;
- the customer deciding to forego a particular study;
- inability to enroll enough patients in the study;
- inability to recruit enough investigators;
- production problems causing shortages of the drug; and
- actions by regulatory authorities.

The loss, reduction in scope or delay of a large contract or the loss or delay of multiple contracts could materially adversely affect our business, although our contracts frequently entitle us to receive the costs of winding down the terminated projects, as well as all fees earned by us up to the time of termination. Some contracts also entitle us to a termination fee.

Our failure to comply with the terms of our current credit agreement could result in an event of default that could materially adversely affect our business, financial condition and results of operations.

If there were an event of default under our credit agreement, First Internet Bank could cause all amounts outstanding under that agreement to be due and payable immediately or exercise other available remedies, which may have an adverse impact on our business, financial condition and results of operations. An event of default may occur should our assets or cash flow be insufficient to fully repay borrowings under our credit agreement, whether paid in the ordinary course or accelerated, or if we are unable to maintain compliance with relevant obligations thereunder, including financial and other covenants. During fiscal 2016 and through the first nine months of fiscal 2017, we operated either in default of, or under forbearance arrangements with respect to, our prior credit agreements with Huntington Bank.

Changes in government regulation or in practices relating to the pharmaceutical industry could change the demand for the services we provide.

Governmental agencies throughout the world, but particularly in the United States, strictly regulate the drug development process. Our business involves helping pharmaceutical and biotechnology companies comply with the regulatory drug approval process. Changes in regulation, such as a relaxation in regulatory requirements or the introduction of simplified drug approval procedures, or an increase in regulatory requirements that we may have difficulty satisfying, or that make our services less competitive, could substantially change the demand for our services. Also, if governments increase efforts to contain drug costs and pharmaceutical and biotechnology company profits from new drugs, our customers may spend less, or reduce their growth in spending on research and development.

We may bear financial risk if we underprice our contracts or overrun cost estimates.

Since some of our contracts are structured as fixed price or fee-for-service, we bear the financial risk if we initially underprice our contracts or otherwise overrun our cost estimates. Such underpricing or significant cost overruns could have a material adverse effect on our business, results of operations, financial condition, and cash flows.

Any failure by us to comply with existing regulations could harm our reputation and operating results.

Any failure on our part to comply with existing regulations could result in the termination of ongoing research or the disqualification of data for submission to regulatory authorities. For example, if we were to fail to properly monitor compliance with study protocols, the data collected could be disqualified. If this were to happen, we may be contractually required to repeat a study at no further cost to the customer, but at substantial cost to us. This would harm our reputation, our prospects for future work and our operating results. Furthermore, the issuance of a notice from the FDA based on a finding of a material violation by us of good clinical practice, good laboratory practice or good manufacturing practice requirements could materially and adversely affect our business and financial performance.

Our future success depends on our ability to keep pace with rapid technological changes that could make our services and products less competitive or obsolete.

The biotechnology, pharmaceutical and medical device industries generally, and contract research services more specifically, are subject to increasingly rapid technological changes. Our competitors or others might develop technologies, services or products that are more effective or commercially attractive than our current or future technologies, services or products, or that render our technologies, services or products less competitive or obsolete. If competitors introduce superior technologies, services or products and we cannot make enhancements to ours to remain competitive, our competitive position, and in turn our business, revenues and financial condition, would be materially and adversely affected. Many of our competitors have superior financial and human resources deployed toward research and development efforts. Our relatively constrained financial and human resources may limit our ability to effectively keep pace with relevant technological changes.

If we are unable to maintain effective internal control over financial reporting or disclosure controls and procedures, the accuracy and timeliness of our financial and other reporting may be adversely affected.

Maintaining effective internal controls over financial reporting is necessary for us to produce reliable financial statements. Moreover, we must maintain effective disclosure controls and procedures in order to provide reasonable assurance that the information required to be reported in our periodic reports filed with the SEC is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer (or persons performing equivalent functions), as appropriate to allow timely decisions regarding required disclosure. If we are unable to maintain effective internal controls over financial reporting or disclosure controls and procedures or remediate any material weakness, it could result in a material misstatement of our consolidated financial statements that would require a restatement or other materially deficient disclosures, investor confidence in the accuracy and timeliness of our financial reports and other disclosures may be adversely impacted, and the market price of our common shares could be negatively impacted.

We operate in a highly competitive industry.

The CRO services industry is highly competitive. We often compete for business not only with other, often larger and better capitalized, CRO companies, but also with internal discovery and development departments within our customers, some of which are large pharmaceutical and biotechnology companies with greater resources than we have. If we do not compete successfully, our business will suffer. The industry is highly fragmented, with numerous smaller specialized companies and a handful of full-service companies with global capabilities much larger than ours. Increased competition might lead to price and other forms of competition that might adversely affect our operating results. As a result of competitive pressures, our industry experienced consolidation in recent years. This trend is

likely to produce more competition among the larger companies for both customers and acquisition candidates.

We might incur expense to develop products that are never successfully commercialized.

We have incurred and expect to continue to incur research and development and other expenses in connection with our products business. The potential products to which we devote resources might never be successfully developed or commercialized by us for numerous reasons, including:

·inability to develop products that address our customers' needs;

·competitive products with superior performance;

·patent conflicts or unenforceable intellectual property rights;

·demand for the particular product; and

·other factors that could make the product uneconomical.

Incurring expenses for a potential product that is not successfully developed and/or commercialized could have a material adverse effect on our business, financial condition, prospects and stock price.

Providing CRO services creates a risk of liability.

We could be held liable for errors and omissions in connection with the services we perform. In certain circumstances, we seek to manage our liability risk through contractual provisions with customers requiring us to be indemnified by the customers or covered by the customers' product liability insurance policies. Although many of our customers are large, well-capitalized companies, the financial performance of these indemnities is not secured. Therefore, we bear the risk that the indemnifying party may not have the financial ability, or may otherwise fail, to fulfill its indemnification obligations or the liability would exceed the amount of applicable insurance. There can be no assurance that our insurance coverage will be adequate, or that insurance coverage will continue to be available on acceptable terms, or that we can obtain indemnification arrangements or otherwise be able to limit our liability risk.

Our business uses biological and hazardous materials, which could injure people or violate laws, resulting in liability that could adversely impact our financial condition and business.

Our activities involve the controlled use of potentially harmful biological materials, as well as hazardous materials, chemicals and various radioactive compounds. We cannot completely eliminate the risk of accidental contamination or injury from the use, storage, handling or disposal of these materials. In the event of contamination or injury, we could be held liable for damages that result, and any liability could exceed our insurance coverage and ability to pay. Any contamination or injury could also damage our reputation, which is critical to obtaining new business. In addition, we are subject to federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. The cost of compliance with these laws and regulations is significant and if changes are made to impose additional requirements, these costs could increase and have an adverse impact on our financial condition and results of operations.

Hardware or software failures, delays in the operations of our computer and communications systems or the failure to implement system enhancements could harm our business.

Our success depends on the efficient and uninterrupted operation of our computer and communications systems. A failure of our network or data gathering procedures could impede the processing of data, delivery of databases and services, customer orders and day-to-day management of our business and could result in the corruption or loss of data. While we have disaster recovery plans in place for our operations, they might not adequately protect us. Despite any precautions we take, damage from fire, floods, hurricanes, power loss, telecommunications failures, computer viruses, break-ins and similar events at our computer facilities could result in interruptions in the flow of data to our servers and from our servers to our customers. In addition, any failure by our computer environment to provide our required data communications capacity could result in interruptions in our service. In the event of a delay in the delivery of data, we could be required to transfer our data collection operations to an alternative provider of server hosting services. Such a transfer could result in delays in our ability to deliver our products and services to our customers. Additionally, significant delays in the planned delivery of system enhancements, improvements and inadequate performance of the systems once they are completed could damage our reputation and harm our business. Finally, long-term disruptions in the infrastructure caused by events such as natural disasters, the outbreak of war, the escalation of hostilities and acts of terrorism, particularly involving cities in which we have offices, could adversely affect our businesses. Although we carry property and business interruption insurance, our coverage might not be adequate to compensate us for all losses that may occur.

Our animal populations may suffer diseases that can damage our inventory, harm our reputation, result in decreased sales of our services or research products or result in other liability to us.

It is important that our animal populations be free of diseases, including infectious diseases. The presence of diseases can distort or compromise the quality of research results, can cause loss of animals in our inventory, can result in harm to humans or outside animal populations if the disease is not contained to animals in inventory, or can result in other losses. Such results could harm our reputation or have a material adverse effect on our financial condition, results of operations, and cash flows.

Our products business depends on our intellectual property.

Our products business is dependent, in part, on our ability to obtain patents in various jurisdictions on our current and future technologies and products, to defend our patents and protect our trade secrets and to operate without infringing on the proprietary rights of others. There can be no assurance that our patents will not be challenged by third parties or that, if challenged, those patents will be held valid. In addition, there can be no assurance that any technologies or products developed by us will not be challenged by third parties owning patent rights and, if challenged, will be held not to infringe on those patent rights. The expense involved in any patent litigation can be significant. We also rely on unpatented proprietary technology, and there can be no assurance that others will not independently develop or obtain similar products or technologies.

We may expand our business through acquisitions, which could expose us to various risks.

We review acquisition candidates as part of our continuing business strategy. Factors which may affect our ability to effectively pursue acquisition targets or to grow successfully through completed acquisitions include:

- inability to obtain financing;
- difficulties and expenses in connection with integrating the acquired companies and achieving the expected benefits;
- diversion of management's attention from current operations;
- the possibility that we may be adversely affected by risks facing the acquired companies;
- acquisitions could be dilutive to earnings, or in the event of acquisitions made through the issuance of our common shares to the shareholders of the acquired company, dilutive to the percentage ownership of our existing stockholders;
- potential losses resulting from undiscovered liabilities of acquired companies not covered by the indemnification we may obtain from the seller;
- loss of key employees of the acquired companies; and
- loss of key customers.

We depend on the pharmaceutical and biotechnology industries.

We believe that due to the significant investment in facilities and personnel required to support drug development, pharmaceutical and biotechnology companies look to outsource some or all of those services. By doing so, they can focus their resources on their core competency of drug discovery, while obtaining the outsourced services from a full-service provider like us. Our revenues depend greatly on the expenditures made by these pharmaceutical and biotechnology companies in research and development. In some instances, companies in these industries are reliant on their ability to raise capital in order to fund their research and development projects and to compensate us for services rendered. Accordingly, economic factors and industry trends that affect our customers in these industries also affect our business. If companies in these industries were to reduce the number of research and development projects they conduct or outsource, our business could be materially adversely affected.

Unfavorable general economic conditions may materially adversely affect our business.

While it is difficult for us to predict the impact of general economic conditions on our business, these conditions could reduce customer demand for some of our products or services, which could cause our revenue to decline. Also, our customers, particularly smaller biotechnology companies which are especially reliant on the credit and capital markets, may not be able to obtain adequate access to credit or equity funding, which could affect their ability to make timely payments to us. Moreover, we rely on credit facilities to provide working capital to support our operations and regularly evaluate alternative financing sources. Changes in the commercial credit market or in the financial stability of our creditors may impact the ability of our creditors to provide additional financing. In addition, the financial condition of our credit facility providers, which is beyond our control, may adversely change. Any decrease in our access to borrowings under our credit facility or successor facilities (if any), tightening of lending standards and other changes to our sources of liquidity could adversely impact our ability to obtain the financing we need to continue operating the business in our current manner. For these reasons, among others, if economic conditions stagnate or decline, our operating results and financial condition could be adversely affected.

We rely on air transportation to serve our customers.

Our business is heavily reliant on air travel for transport of samples and other material, products and people. A significant disruption to the air travel system, or our access to it, could have a material adverse effect on our business.

Privacy regulations could increase our costs or limit our services.

U.S. Department of Health and Human Services regulations under the Health Insurance Portability and Accountability Act of 1996 demand compliance with patient privacy and confidentiality requirements. In addition, some state governments are considering more stringent regulations. These regulations might require us to increase our investment in security or limit the services we offer. We could be found liable if we fail to meet existing or proposed regulations on privacy and security of health information.

We could experience a breach of the confidentiality of the information we hold or of the security of our computer systems.

We operate large and complex computer systems that contain significant amounts of client data. As a routine element of our business, we collect, analyze, and retain substantial amounts of data pertaining to the clinical and non-clinical

studies we conduct for our clients. Unauthorized third parties could attempt to gain entry to such computer systems for the purpose of stealing data or disrupting the systems. We believe that we have taken appropriate measures to protect them from intrusion, and we continue to improve and enhance our systems in this regard, but in the event that our efforts are unsuccessful, we could suffer significant harm. Our contracts with our clients typically contain provisions that require us to keep confidential the information generated from these studies. In the event the confidentiality of such information was compromised, we could suffer significant harm.

We may be affected by health care reform.

In March 2010, the United States Congress enacted the Patient Protection and Affordable Care Act ("PPACA") intended over time to expand health insurance coverage and impose health industry cost containment measures. PPACA legislation and the accompanying regulations may significantly impact the pharmaceutical and biotechnology industries as its implementation continues. In addition, the U.S. Congress, various state legislatures and European and Asian governments may consider various types of health care reform in order to control growing health care costs. We are unable to predict what legislative proposals will be adopted in the future, if any.

Implementation of health care reform legislation may have certain benefits but also may contain costs that could limit the profits that can be made from the development of new drugs. This could adversely affect research and development expenditures by pharmaceutical and biotechnology companies, which could in turn decrease the business opportunities available to us both in the United States and abroad. In addition, new laws or regulations may create a risk of liability, increase our costs or limit our service offerings.

Risks Related to Share Ownership

Our share price could be volatile and our trading volume may fluctuate substantially.

The market price of our common shares has historically experienced and might continue to experience volatility. Many factors could have a significant impact on the future price of our common shares, including:

- our failure to successfully implement our business objectives;
- compliance with ongoing regulatory requirements;
- market acceptance of our products;
- technological innovations, new commercial products or drug discovery efforts and preclinical and clinical activities by us or our competitors;
- changes in government regulations;
- general economic conditions and other external factors;
- actual or anticipated fluctuations in our quarterly financial and operating results;
- the degree of trading liquidity in our common shares; and
- our ability to meet the minimum standards required for remaining listed on the NASDAQ Capital Market.

These factors also include ones beyond our control, such as market conditions within our industry and changes in pharmaceutical and biotechnology industries. In addition, in recent years, the stock market has experienced significant price and volume fluctuations. The stock market, and in particular the market for pharmaceutical and biotechnology company stocks, has also experienced significant decreases in value in the past. This volatility and valuation decline have affected the market prices of securities issued by many companies, often for reasons unrelated to their operating performance, and might adversely affect the price of our common shares.

If we are unable to maintain listing of our securities on the NASDAQ Capital Market or another reputable stock exchange, it may be more difficult for the Company's shareholders to sell their securities.

NASDAQ requires listing issuers to comply with certain standards in order to remain listed on its exchange. If, for any reason, NASDAQ should delist the Company's securities from trading on its exchange and the Company is unable to obtain listing on another reputable national securities exchange, a reduction in some or all of the following may occur, each of which could materially adversely affect our shareholders:

- the liquidity of our common shares;

- the market price of our common shares;
- our ability to obtain financing for the continuation of our operations;
- the number of institutional and general investors that will consider investing in our common shares;
- the number of market makers in our common shares;
- the availability of information concerning the trading prices and volume of our common shares; and
- the number of broker-dealers willing to execute trades in shares of our common shares

There is no public market for the Series A preferred shares.

There is no established public trading market for the Series A preferred shares that were sold May 11, 2011, and we do not expect a market to develop. In addition, we have not and do not intend to apply to list the Series A preferred shares on any securities exchange. Without an active market, the liquidity of these securities is limited.

We have never paid cash dividends and currently do not intend to do so.

We have never declared or paid cash dividends on our common shares. We currently plan to retain any earnings to finance the growth of our business rather than to pay cash dividends. Payments of any cash dividends in the future will depend on our financial condition, results of operations and capital requirements, as well as other factors deemed relevant by our board of directors.

ITEM 1B–UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 2–PROPERTIES

We operate in the following locations, all of which we own, except as otherwise indicated:

· **Our principal executive offices** are located at 2701 Kent Avenue, West Lafayette, Indiana 47906, with approximately 120,000 total square feet of operations, manufacturing, administrative space and leased space, which leased space comprises approximately 50,000 square feet of the total. Both the contract research services segment and the products segment conduct operations at this facility. The building has been financed by mortgages.

· **BAS Evansville Inc**. is in Evansville, Indiana. We occupy 10 buildings with roughly 92,000 square feet of operating and administrative space on 52 acres. Most of this site is engaged in preclinical toxicology testing of developmental drugs in animal models. The contract research services segment conducts operations at this facility.

We believe that our facilities are adequate for our current operations and that suitable additional space will be available if and when needed, including to the extent necessary to expand operations. The terms of any mortgages and leases for the above properties are detailed in Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations, and Notes 6 and 7 to the Notes to Consolidated Financial Statements.

ITEM 3–LEGAL PROCEEDINGS

We are involved from time to time in claims, lawsuits, and government proceedings relating to our operations. We may also be subject to other claims and potential claims, including those relating to product and general liability, workers' compensation and employment-related matters. The ultimate outcome of claims, lawsuits, and proceedings cannot be predicted with certainty. However, we do not currently believe that we are party to any material pending legal proceedings.

ITEM 4–MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5–MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

As of September 30, 2017, our common shares were traded on the NASDAQ Capital Market under the symbol "BASi". The following table sets forth the quarterly high and low sales price per share of our common shares from October 1, 2014 through September 30, 2016.

	High	Low
Fiscal Year Ended September 30, 2016		
First Quarter	$1.73	$1.38
Second Quarter	1.60	1.04
Third Quarter	1.25	0.92
Fourth Quarter	1.40	1.09
Fiscal Year Ended September 30, 2017		
First Quarter	$1.13	$0.63
Second Quarter	1.70	0.68
Third Quarter	1.75	1.16
Fourth Quarter	1.90	1.48

Holders

There were approximately 2,700 holders of record of our common shares as of December 15, 2017.

Dividends

We did not pay any cash dividends on our common shares in fiscal years 2017 or 2016 and do not anticipate paying cash dividends in the foreseeable future. Dividends paid on our Series A preferred shares are discussed in Note 3 to

the Notes to Consolidated Financial Statements.

ITEM 6–SELECTED FINANCIAL DATA

Not applicable.

ITEM 7–MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis should be read in conjunction with the Consolidated Financial Statements and notes thereto included or incorporated by reference elsewhere in this Report. In addition to the historical information contained herein, the discussions in this Report may contain forward-looking statements that may be affected by risks and uncertainties, including those discussed in Item 1A, Risk Factors. Our actual results could differ materially from those discussed in the forward-looking statements. Please refer to page 1 of this Report for a cautionary statement regarding forward-looking information.

References to years or portions of years in this Item refer to our fiscal year ended September 30, unless otherwise indicated. The following amounts are in thousands unless otherwise indicated.

Recent Events

New Credit Facility

On June 23, 2017, we entered into a new Credit Agreement (the "Credit Agreement") with First Internet Bank of Indiana ("FIB"). The Credit Agreement includes both a term loan and a revolving line of credit and is secured by mortgages on our facilities and personal property in West Lafayette and Evansville, Indiana. We used the proceeds from the term loan to satisfy our indebtedness with Huntington Bank and terminated the related interest rate swap. We had a zero balance on our new line of credit as of September 30, 2017. During fiscal 2016 and through the first nine months of fiscal 2017, we had operated either in default of, or under forbearance arrangements with respect to, our credit agreements with Huntington Bank.

Business Overview

We are a contract research organization providing drug discovery and development services. Our customers and partners include pharmaceutical, biotechnology, academic and governmental organizations. We apply innovative technologies and products and a commitment to quality to help customers and partners accelerate the development of safe and effective therapeutics and maximize the returns on their research and development investments. We offer an efficient, variable-cost alternative to our customers' internal product development programs. Outsourcing development work to reduce overhead and speed drug approvals through the Food and Drug Administration ("FDA") is an established

alternative to in-house development among pharmaceutical companies. We derive our revenues from sales of our research services and drug development tools, both of which are focused on determining drug safety and efficacy. The Company has been involved in the research of drugs to treat numerous therapeutic areas for over 40 years.

We support the preclinical and clinical development needs of researchers and clinicians for small molecule and large biomolecule drug candidates. Our scientists have the skills in analytical instrumentation development, chemistry, computer software development, physiology, medicine, analytical chemistry and toxicology to make the services and products we provide increasingly valuable to our current and potential customers. Our principal customers are scientists engaged in analytical chemistry, drug safety evaluation, clinical trials, drug metabolism studies, pharmacokinetics and basic research at many of the small start-up biotechnology companies and the largest global pharmaceutical companies.

Our business is largely dependent on the level of pharmaceutical and biotechnology companies' efforts in new drug discovery and approval. Our contract research services segment is a direct beneficiary of these efforts, through outsourcing by these companies of research work. Our products segment is an indirect beneficiary of these efforts, as increased drug development leads to capital expansion, providing opportunities to sell the equipment we produce and the consumable supplies we provide that support our products.

Developments within the industries we serve have a direct, and sometimes material, impact on our operations. Currently, many large pharmaceutical companies have major "block-buster" drugs that are nearing the end of their patent protections. This puts significant pressure on these companies both to develop new drugs with large market appeal, and to re-evaluate their cost structures and the time-to-market of their products. Contract research organizations ("CROs") have benefited from these developments, as the pharmaceutical industry has turned to out-sourcing to both reduce fixed costs and to increase the speed of research and data development necessary for new drug applications. The number of significant drugs that have reached or are nearing the end of their patent protection has also benefited the generic drug industry. Generic drug companies provide a significant source of new business for CROs as they develop, test and manufacture their generic compounds.

We also believe that the development of innovative new drugs is going through an evolution, evidenced by the significant reduction of expenditures on research and development at several major international pharmaceutical companies, accompanied by increases in outsourcing and investments in smaller start-up companies that are performing the early development work on new compounds. Many of these smaller companies are funded by either venture capital or pharmaceutical investment, or both, and generally do not build internal staffs that possess the extensive scientific and regulatory capabilities to perform the various activities necessary to progress a drug candidate to the filing of an Investigative New Drug application with the FDA.

A significant portion of innovation in the pharmaceutical industry is now being driven by biotech and small, venture capital funded drug development companies. Many of these companies are “single-molecule” entities, whose success depends on one innovative compound. While several biotech companies have reached the status of major pharmaceuticals, the industry is still characterized by smaller entities. These developmental companies generally do not have the resources to perform much of the research within their organizations, and are therefore dependent on the CRO industry for both their research and for guidance in preparing their FDA submissions. These companies have provided significant new opportunities for the CRO industry, including us. They do, however, provide challenges in selling, as they frequently have only one product in development, which causes CROs to be unable to develop a flow of projects from a single company. These companies may expend all their available funds and cease operations prior to fully developing a product. Additionally, the funding of these companies is subject to investment market fluctuations, which changes as the risk profiles and appetite of investors change.

While continuing to maintain and develop our relationships with large pharmaceutical companies, we intend to aggressively promote our services to developing businesses, which will require us to expand our existing capabilities to provide services early in the drug development process, and to consult with customers on regulatory strategy and compliance leading to their FDA filings. Our Enhanced Drug Discovery services, part of this strategy, utilizes our proprietary *Culex*® technology to provide early experiments in our laboratories that previously would have been conducted in the sponsor’s facilities. As we move forward, we must balance the demands of the large pharmaceutical companies with the personal touch needed by smaller biotechnology companies to develop a competitive advantage. We intend to accomplish this through the use of and expanding upon our existing project management skills, strategic partnerships and relationship management.

Research services are capital intensive. The investment in equipment and facilities to serve our markets is substantial and continuing. Rapid changes in automation, precision, speed and technologies necessitate a constant investment in equipment and software to meet market demands. Market opportunities may also prompt investment in upkeep or expansion of our facilities. We are also impacted by the heightened regulatory environment and the need to improve our business infrastructure to support our operations, which will necessitate additional capital investment. Our ability to generate capital to reinvest in our capabilities, both through operations and financial transactions, is critical to our success. Sustained growth will require additional investment in future periods. Continued positive cash flow and access to capital will be important to our ability to make such investments.

Executive Summary

Our revenues are dependent on a relatively small number of industries and customers. As a result, we closely monitor the market for our services. For a discussion of the trends affecting the market for our services, see “Item 1. Business – Trends Affecting the Drug Discovery and Development Industry.” In fiscal 2017, we experienced a 26.7% increase in revenues in our Services segment and an 10.1% decrease in revenues for our Products segment as compared to fiscal 2016. Our Services revenue was positively impacted by increased preclinical services and pharmaceutical analysis studies as well as our efforts to initiate archive revenues in fiscal 2017. The revenue decline in our Product segment was mainly due to lower sales of our analytical instruments as compared to the prior fiscal year.

We review various metrics to evaluate our financial performance, including revenue, margins and earnings. In fiscal 2017, total revenues increased 18.6%, gross profit increased 73.9% and operating expenses were lower by 14.0% as compared to fiscal 2016. The increased revenues and margins contributed to the reported operating income of $1,278 for fiscal 2017 compared to an operating loss of $3,040 for the prior year period. For a detailed discussion of our revenue, margins, earnings and other financial results for the fiscal year ended September 30, 2017, see “Results of Operations – 2017 Compared to 2016 below.

As of September 30, 2017, we had $434 of cash and cash equivalents as compared to $386 of cash and cash equivalents at the end of fiscal 2016. In fiscal 2017, we generated $1,236 in cash from operations as compared to $1,060 in fiscal 2016. Total capital expenditures decreased in fiscal 2017 to $347, down from $1,256 in fiscal 2016. In addition, accounts payable and inventory decreased by $913 and $540, respectively, compared to prior fiscal year. We had a zero balance on our line of credit as of September 30, 2017.

The fiscal 2017 financial results reflect management’s initiatives aimed at growing revenue, reducing costs and generating additional cash flow. We believe that our new Credit Agreement with FIB, as described in Recent Events, gives us the liquidity to continue to implement initiatives begun in fiscal 2017. Also, in fiscal 2017, we welcomed the Company’s founder as a scientific advisor to management. We focused on marketing efforts to improve our message to customers and increase our visibility in the marketplace. We significantly reduced our employee turnover in fiscal 2017 and began investing in developing complementary services and evaluating expansion and growth initiatives. We intend to keep these trends and initiatives moving forward into fiscal 2018 in order to grow our business and recruit and retain talent.

During fiscal 2018 for the Products segment, we intend to increase our investment in Product research and development for upgrades to current products and potential future new products. We intend to further develop and expand our relationships with distributors and resellers to boost sales in our Product business. We anticipate adding additional partnerships with companies like Joanneum Research and PalmSens to expand our Product offerings. Further, we have added key talent to help drive these initiatives and focus on rebuilding the relationships with our customers.

For the Services segment in fiscal 2018, we are investing in laboratory equipment to add efficiencies and capabilities. We are investing in talent and equipment upgrades to revive our discovery services capabilities. We will continue the practice of charging for archive services as warranted. Further, we are exploring a possible expansion for preclinical services to meet customer demand.

Our long-term strategic objective is to maximize the Company’s intrinsic value per share. While we remain focused on productivity and better processes and a continued emphasis on generating free cash flow, we are also dedicated to the strategies and initiatives mentioned above.

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Results of Operations

The following table summarizes the consolidated statement of operations as a percentage of total revenues:

	Year Ended September 30,			
	2017		2016	
Services revenue	83.3	%	77.9	%
Products revenue	16.7		22.1	
Total revenue	100.0	%	100.0	%
Cost of services revenue [(a)]	69.3		83.9	
Cost of products revenue [(a)]	62.9		58.9	
Total cost of revenue	68.2		78.4	
Gross profit	31.8		21.6	
Operating expenses	26.4		36.5	
Operating income (loss)	5.4		(14.9	)
Other income (expense)	1.5		(1.0	)
Income (loss) before income taxes	3.9		(15.9	)
Income tax (expense) benefit	(0.1	)	0.1	
Net income (loss)	3.8	%	(15.8	%)

(a) Percentage of service and product revenues, respectively.

2017 Compared to 2016

Services and Products Revenues

Revenues for the year ended September 30, 2017 increased 18.6% to $24,242 compared to $20,441 for the year ended September 30, 2016.

Our Services revenue increased 26.7% in fiscal 2017 to $20,182 compared to $15,924 for the prior fiscal year. Preclinical services revenues increased due to an overall increase in the number of studies from the prior fiscal year period. Other laboratory services revenues were positively impacted by higher discovery and pharmaceutical analysis revenues in fiscal 2017 versus the comparable period in fiscal 2016. Also, in fiscal 2017 we instituted the practice of uniformly charging archive fees to clients where contracts allow. Archive revenue added $572 to Other laboratory services revenue in fiscal 2017. Bioanalytical analysis revenues decreased due to fewer samples received and analyzed in fiscal 2017 in addition to a mix favoring method development and validation projects during this time period, which generate lower revenue but involve more dedicated resources.

	Fiscal Year Ended September 30,			
	2017	2016	Change	%
Bioanalytical analysis	$ 4,823	$ 5,273	$ (450)	-8.5 %
Preclinical services	13,010	9,948	3,062	30.8 %
Other laboratory services	2,349	703	1,646	234.1 %
	$ 20,182	$ 15,924	$ 4,258	

Sales in our Products segment decreased 10.1% from $4,517 to $4,060 when compared to the prior fiscal year. The decline stems mainly from lower sales of analytical instruments.

	Fiscal Year Ended September 30,			
	2017	2016	Change	%
Culex, in-vivo sampling systems	$ 1,977	$ 2,001	$ (24)	-1.2 %
Analytical instruments	1,354	1,698	(344)	-20.3%
Other instruments	729	818	(89)	-10.9%
	$ 4,060	$ 4,517	$ (457)	

Cost of Revenue

Cost of revenue for the year ended September 30, 2017 was $16,545 or 68.2% of revenue compared to $16,016 or 78.4% of revenue for the prior fiscal year.

Cost of Services revenue as a percentage of Services revenue decreased to 69.3% in the current fiscal year from 83.9% in the prior fiscal year. The principal cause of this decrease was the increase in revenues, which led to higher absorption of the fixed costs in our Services segment. A significant portion of our costs of productive capacity in the Services segment are fixed. Thus, increases in revenues led to decreases in costs as a percentage of revenue.

Cost of Products revenue as a percentage of Products revenue in fiscal 2017 increased to 62.9% from 58.9% in the prior fiscal year. This increase is mainly due to the mix of sales favoring lower margin instruments and efforts to reduce inventory in fiscal 2017.

Operating Expenses

Selling expenses for the year ended September 30, 2017 decreased by 25.7% to $1,053 from $1,417 for the year ended September 30, 2016. This decrease is mainly due to lower salaries and benefits from the loss of sales employees and lower consulting costs in fiscal 2017 compared to the same period in fiscal 2016, partially offset by higher commissions.

Research and development expenses for the year ended September 30, 2017 decreased 6.3% to $465 from $496 for the year ended September 30, 2016. The decrease was primarily due to lower salaries and benefits from the loss of an employee in fiscal 2016 as well as lower outside services expenses, partially offset by higher consulting expenses.

General and administrative expenses for the current fiscal year increased 7.0% to $4,901 from $4,581 for the prior fiscal year. The principal reason for the increase in fiscal 2017 was higher costs for consulting services. This increase was partially offset by decreased spending for other outside services.

In fiscal 2016, we incurred a non-recurring goodwill charge. In late fiscal 2015, we began to experience a declining revenue pattern resulting from a smaller percentage of quotes accepted for our Bioanalytical analysis services due in part to staff turnover in our business development group. Accordingly, step two of the goodwill impairment test was completed for the Bioanalytical Services reporting unit which resulted in an impairment of all the goodwill associated with our Bioanalytical analysis services, totaling $971. There was no indication of impairment for the Preclinical services reporting unit as of September 30, 2017 and 2016, respectively.

Other Income/Expense

Other income/expense, net, was expense of $370 for the year ended September 30, 2017 as compared to expense of $204 for the year ended September 30, 2016. The primary reason for the increase in expense is the change in the fair value of the warrant liability which expired in May 2016. Thus, no fair value changes were recorded in fiscal 2017. Also, interest expense decreased $24 or 6% in fiscal 2017 compared to fiscal 2016.

Income Taxes

Our effective tax rate for the year ended September 30, 2017 was 2.6% compared to 0.4% for the prior fiscal year. The current year expense primarily relates to state income taxes and alternative minimum taxes. No net benefits have been provided on taxable losses in the current fiscal year.

Accrued Expenses

As part of a fiscal 2012 restructuring, we accrued for lease payments at the cease use date for our United Kingdom facility and have considered free rent, sublease rentals and the number of days it would take to restore the space to its original condition prior to our improvements. Based on these matters, we have a $1,000 reserve for lease related costs. Additionally, we accrued $117 for legal and professional fees and other costs to remove improvements previously made to the facility. At September 30, 2017 and 2016, respectively, we had $1,117 reserved for the liability. The reserve is classified as a current liability on the Consolidated Balance Sheets.

Liquidity and Capital Resources

Comparative Cash Flow Analysis

At September 30, 2017, we had cash and cash equivalents of $434 compared to $386 at September 30, 2016, plus we had $2,000 available on our line of credit as of September 30, 2017.

Net cash provided by operating activities was $1,236 for the year ended September 30, 2017, compared to net cash provided by operating activities of $1,060 for the year ended September 30, 2016. The increase in cash provided by operating activities in fiscal 2017 partially resulted from operating income versus an operating loss in fiscal 2016. Other contributing factors to our cash from operations in fiscal 2017 were noncash charges of $1,680 for depreciation and amortization and $19 for stock option expense as well as a decrease in inventory of $540. These factors were partially offset by, among other items, a decrease in accounts payable of $913 and an increase in accounts receivable of $941.

Days' sales in accounts receivable increased to 48 days at September 30, 2017 from 40 days at September 30, 2016 due to extended customer payments and a decrease in unbilled revenues**.** It is not unusual to see a fluctuation in the Company's pattern of days' sales in accounts receivable. Customers may expedite or delay payments from period-to-period for a variety of reasons including, but not limited to, the timing of capital raised to fund on-going research and development projects.

Included in operating activities for fiscal 2016 are non-cash charges of $1,556 for depreciation and amortization, $971 for goodwill impairment and $45 for stock option expense as well as a decrease in accounts receivable of $1,639 and an increase in accounts payable of $1,122. These factors were partially offset by, among other items, a decrease in accrued expenses of $621 and a decrease in customer advances of $300.

Investing activities used $339 in fiscal 2017 due to capital expenditures of $347 as opposed to $1,256 in fiscal 2016. The investing activity in fiscal 2017 consisted of investments in computing infrastructure, building improvements and laboratory equipment. The investing activity in fiscal 2016 consisted of investments in computing infrastructure, building improvements and equipment replacement.

Financing activities used $849 in fiscal year 2017 as compared to $144 provided in fiscal 2016. The main use of cash in fiscal 2017 was the payoff of the Huntington Bank long-term debt and line of credit. Total long-term debt and net line of credit payments were $5,079. Capital lease payments of $127 and payment of debt issuance costs of $214 also used cash. These uses of cash were partially offset by $4,500 of new borrowings from our new Credit Agreement with FIB. The main uses of cash in fiscal 2016 were for net borrowings on our line of credit of $1,272 offset by capital lease payments of $277, net payments on our long-term debt of $786 and payment of debt issuance costs of $68.

Capital Resources

New Credit Facility

On June 23, 2017, we entered into a new Credit Agreement (the "Credit Agreement") with First Internet Bank of Indiana ("FIB"). The Credit Agreement includes both a term loan and a revolving line of credit and is secured by mortgages on our facilities and personal property in West Lafayette and Evansville, Indiana. We used the proceeds from the term loan to satisfy our indebtedness with Huntington Bank and terminated the related interest rate swap. During fiscal 2016 and throughout most of the first nine months of fiscal 2017, we had operated either in default of, or under forbearance arrangements with respect to, our credit agreements with Huntington Bank.

The term loan for $4,500 bears interest at a fixed rate of 3.99%, with monthly principal and interest payments of approximately $33. The term loan matures in June 2022. The balance on the term loan at September 30, 2017 was $4,446. The revolving line of credit for up to $2,000 matures in June 2019 and bears interest at the Prime Rate (generally defined as the highest rate identified as the "Prime Rate" in The Wall Street Journal "Money Rates" column on the date the interest rate is to be determined, or if that date is not a publication date, on the publication date immediately preceding) less twenty-five (25) basis points (0.25%). There was a zero balance on the revolving line of credit at September 30, 2017. We must pay accrued and unpaid interest on the outstanding balance under the credit line on a monthly basis.

The Credit Agreement contains various restrictive covenants, including restrictions on the Company's ability to dispose of assets, make acquisitions or investments, incur debt or liens, make distributions to shareholders or repurchase outstanding stock, enter into related party transactions and make capital expenditures, other than upon satisfaction of the conditions set forth in the Credit Agreement. The Credit Agreement also requires us to maintain (i) a minimum debt service coverage ratio of not less than 1.20 to 1.00 for the quarters ending September 30, 2017 and December 31, 2017 and of not less than 1.25 to 1.0 for the quarters thereafter and (ii) beginning with the quarter ending September 30, 2017, a debt to equity ratio of not greater than 2.50 to 1.00 until maturity. Upon an event of default, which includes certain customary events such as, among other things, a failure to make required payments when due, a failure to comply with covenants, certain bankruptcy and insolvency events, and defaults under other material indebtedness, FIB may cease advancing funds, increase the interest rate on outstanding balances, accelerate amounts outstanding, terminate the agreement and foreclose on all collateral. The Company was in compliance with these covenants as of September 30, 2017.

The Company's sources of liquidity for fiscal 2018 are expected to consist primarily of cash generated from operations, cash on-hand and, if needed, borrowings under our revolving credit facility. Management believes that the resources described above will be sufficient to fund operations, planned capital expenditures and working capital requirements over the next twelve months.

On January 28, 2015, the Company entered into a lease agreement with Cook Biotech, Inc. The lease agreement has and will provide the Company with additional cash in the range approximately $50 per month during the first year of the initial term to approximately $57 per month during the final year of the initial term.

The following table summarizes the cash payments under our contractual term debt and other obligations at September 30, 2017 and the effect such obligations are expected to have on our liquidity and cash flows in future fiscal periods (amounts in thousands). The table does not include our revolving line of credit. Additional information on the debt is described in Note 8, Debt Arrangements.

	2018	2019	2020	2021	2022	Total
Term loan	$224	$233	$242	$252	$3,495	$4,446
Capital lease obligations	136	69	-	-	-	205
Operating leases	24	24	19	7	-	74
	$384	$326	$261	$259	$3,495	$4,725

Equity Offering (amounts in this section not in thousands)

On May 11, 2011, we completed a registered public offering of 5,506 units at a price of $1,000 per unit. Each unit consisted of one 6% Series A convertible preferred share which is convertible into 500 common shares at a conversion price of $2.00 per share, one Class A Warrant to purchase 250 common shares at an exercise price of $2.00 per share, and one Class B Warrant to purchase 250 common shares at an exercise price of $2.00 per share.

The designation, rights, preferences and other terms and provisions of the Preferred Shares are set forth in the Certificate of Designation. The Series A preferred shares participate in any dividends payable upon our common shares on an “as converted” basis. The Class B Warrants expired in May 2012 and the Class A Warrants expired in May 2016. The Class A Warrants were accounted for as a liability using the fair value for each on the issuance date and were marked to fair value at each reporting date. The net proceeds from the sale of the units, after deducting the fees and expenses of the placement agent and other expenses were $4.6 million. We used the proceeds for the purchase of laboratory equipment and for working capital and general corporate purposes. Because the preferred dividend or make-whole payment is triggered at the option of the preferred shareholder, we recorded the dividend liability at the time of the offering close.

As of September 30, 2017, 4,471 preferred shares had been converted into 2,639,108 common shares and 217,366 common shares have been issued for quarterly preferred dividends for remaining outstanding, unconverted preferred shares. At September 30, 2017, 1,035 preferred shares remained outstanding.

Inflation

We do not believe that inflation has had a material adverse effect on our business, operations or financial condition.

Critical Accounting Policies

“Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Liquidity and Capital Resources” discusses the consolidated financial statements of the Company, which have been prepared in accordance with accounting principles generally accepted in the United States. Preparation of these financial statements requires management to make judgments and estimates that affect the reported amounts of assets, liabilities, revenues and expenses, and the disclosures of contingent assets and liabilities. Certain significant accounting policies applied in the preparation of the financial statements require management to make difficult, subjective or complex judgments, and

are considered critical accounting policies. We have identified the following areas as critical accounting policies.

Revenue Recognition

The majority of our Bioanalytical and analytical research service contracts involve the development of analytical methods and the processing of bioanalytical samples for pharmaceutical companies and generally provide for a fixed fee for each sample processed. Revenue is recognized under the specific performance method of accounting and the related direct costs are recognized when services are performed. Our preclinical research service contracts generally consist of preclinical studies, and revenue is recognized under the proportional performance method of accounting. Revisions in profit estimates, if any, are reflected on a cumulative basis in the period in which such revisions become known. The establishment of contract prices and total contract costs involves estimates we make at the inception of the contract. These estimates could change during the term of the contract and impact the revenue and costs reported in the consolidated financial statements. Revisions to estimates have generally not been material. Research service contract fees received upon acceptance are deferred until earned, and classified within customer advances. Unbilled revenues represent revenues earned under contracts in advance of billings.

Beginning in calendar year 2017, we began to recognize archive revenue when the following criteria are met: (1) persuasive evidence of an arrangement exists; (2) services have been rendered; (3) the invoice price is fixed or determinable; and (4) collectability of the resulting receivable is reasonably assured. Archiving revenues are recognized in the month the service is provided, and customers are generally billed on a monthly basis on contractually agreed-upon terms. Amounts related to future archiving or prepaid archiving contracts for customers where archiving fees are billed in advance are accounted for as deferred revenue and recognized ratably over the period the applicable archive service is performed. For archiving revenues that were billed for services rendered prior to calendar year 2017, revenue is recognized when the invoice is paid by the customer.

Product revenue from sales of equipment not requiring installation, testing or training is recognized upon shipment to customers. One product includes internally developed software and requires installation, testing and training, which occur concurrently. Revenue from these sales is recognized upon completion of the installation, testing and training when the services are bundled with the equipment sale.

Long-Lived Assets, Including Goodwill

Long-lived assets, such as property and equipment, and purchased intangibles subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized of the amount by which the carrying amount of the asset exceeds the fair value of the asset.

We carry goodwill at cost. Other intangible assets with definite lives are stated at cost and are amortized on a straight-line basis over their estimated useful lives. All intangible assets acquired that are obtained through contractual or legal right, or are capable of being separately sold, transferred, licensed, rented, or exchanged, are recognized as an asset apart from goodwill. Goodwill is not amortized.

Goodwill is tested annually for impairment and more frequently if events and circumstances indicate that the asset might be impaired. First, we can assess qualitative factors in determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. Then, we follow a two-step quantitative process. In the first step, we compare the fair value of each reporting unit, as computed primarily by present value cash flow calculations, to its book carrying value, including goodwill. We do not believe that market value is indicative of the true fair value of the Company mainly due to average daily trading volumes of less than 1%. If the fair value exceeds the carrying value, no further work is required and no impairment loss is recognized. If the carrying value exceeds the fair value, the goodwill of the reporting unit is potentially impaired and we would then complete step 2 in order to measure the impairment loss. In step 2, the implied fair value is compared to the carrying amount of the goodwill. If

the implied fair value of goodwill is less than the carrying value of goodwill, we would recognize an impairment loss equal to the difference. The implied fair value is calculated by allocating the fair value of the reporting unit (as determined in step 1) to all of its assets and liabilities (including unrecognized intangible assets) and any excess in fair value that is not assigned to the assets and liabilities is the implied fair value of goodwill.

The discount rate, gross margin and sales growth rates are the material assumptions utilized in our calculations of the present value cash flows used to estimate the fair value of the reporting units when performing the annual goodwill impairment test. Our reporting unit with goodwill at September 30, 2017 is Preclinical Services which is included in our contract research services segment, based on the discrete financial information available which is reviewed by management. We utilize a cash flow approach in estimating the fair value of the reporting units, where the discount rate reflects a weighted average cost of capital rate. The cash flow model used to derive fair value is sensitive to the discount rate and sales growth assumptions used.

We performed our annual goodwill impairment test for our Preclinical services reporting unit at September 30, 2017, and there was no indication of impairment.

Considerable management judgment is necessary to evaluate the impact of operating and macroeconomic changes and to estimate future cash flows. Assumptions used in our impairment evaluations, such as forecasted sales growth rates and our cost of capital or discount rate, are based on the best available market information. Changes in these estimates or a continued decline in general economic conditions could change our conclusion regarding an impairment of goodwill and potentially result in a non-cash impairment loss in a future period. The assumptions used in our impairment testing could be adversely affected by certain of the risks discussed in “Risk Factors” in Item 1A of this report. There have been no significant events since the timing of our impairment tests that would have triggered additional impairment testing.

At September 30, 2017 and 2016, respectively, the remaining recorded goodwill was $38.

Stock-Based Compensation

We recognize the cost resulting from all share-based payment transactions in our financial statements using a fair-value-based method. We measure compensation cost for all share-based awards based on estimated fair values and recognize compensation over the vesting period for awards. We recognized stock-based compensation related to stock options of $19 and $45 during the fiscal years ended September 30, 2017 and 2016, respectively.

We use the binomial option valuation model to determine the grant date fair value. The determination of fair value is affected by our common share price as well as assumptions regarding subjective and complex variables such as expected employee exercise behavior and our expected stock price volatility over the term of the award. Generally, our assumptions are based on historical information and judgment is required to determine if historical trends may be indicators of future outcomes. We estimated the following key assumptions for the binomial valuation calculation:

- *Risk-free interest rate.* The risk-free interest rate is based on U.S. Treasury yields in effect at the time of grant for the expected term of the option.

- *Expected volatility.* We use our historical share price volatility on our common shares for our expected volatility assumption.

- *Expected term.* The expected term represents the weighted-average period the stock options are expected to remain outstanding. The expected term is determined based on historical exercise behavior, post-vesting termination patterns, options outstanding and future expected exercise behavior.

- *Expected dividends.* We assumed that we will pay no dividends.

Employee stock-based compensation expense recognized in fiscal 2017 and 2016 was calculated based on awards ultimately expected to vest and has been reduced for estimated forfeitures. Forfeitures are revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates and an adjustment will be recognized at that time.

Income Tax Accounting

As described in Note 8 to the consolidated financial statements, we use the asset and liability method of accounting for income taxes. We recognize deferred tax assets and liabilities for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating loss and tax credit carry-forwards. We measure deferred tax assets and liabilities using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. We recognize the effect on deferred tax assets and liabilities of a change in tax rates in income in the period that includes the enactment date. We record valuation allowances based on a determination of the expected realization of tax assets.

We recognize the tax benefit from an uncertain tax position only if it is more likely than not to be sustained upon examination based on the technical merits of the position. We measure the amount of the accrual for which an exposure exists as the largest amount of benefit determined on a cumulative probability basis that we believe is more likely than not to be realized upon ultimate settlement of the position.

We record interest and penalties accrued in relation to uncertain income tax positions as a component of income tax expense. Any changes in the accrued liability for uncertain tax positions would impact our effective tax rate. Over the next twelve months we do not anticipate resolution to the carrying value of our reserve. Interest and penalties are included in the reserve.

As of September 30, 2017 and 2016, we had a $16 liability for uncertain income tax positions, respectively.

We file income tax returns in the U.S. and several U.S. states. We remain subject to examination by taxing authorities in the jurisdictions in which we have filed returns for years after 2012.

Inventories

Inventories are stated at the lower of cost or market using the first-in, first-out (FIFO) cost method of accounting. We evaluate inventories on a regular basis to identify inventory on hand that may be obsolete or in excess of current and future projected market demand. For inventory deemed to be obsolete, we provide a reserve for this inventory. Inventory that is in excess of current and projected use is reduced by an allowance to a level that approximates the estimate of future demand.

Interest Rate Swap

The Company used an interest rate swap designated as a cash flow hedge to fix the interest rate on 60% of its prior debt with Huntington Bank due to changes in interest rates. The changes in the fair value of the interest rate swap were recorded in Accumulated Other Comprehensive Income (“AOCI”) to the extent effective. We assessed on an ongoing basis whether the derivative that was used in the hedging transaction was highly effective in offsetting changes in cash flows of the hedged debt. The terms of the interest rate swaps matched the terms of the underlying debt resulting in no ineffectiveness. When we determine that a derivative is not highly effective as a hedge, hedge accounting would be discontinued and we would have reclassified gains or losses that were accumulated in AOCI to other income (expense), net on the Condensed Consolidated Statements of Operations and Comprehensive Income (Loss). The interest rate swap was terminated as a result of the new credit facility described above and the balance was reduced to zero as of June 30, 2017.

Building Lease

The Lease Agreement with Cook Biotech, Inc. for a portion of the Company’s headquarters facility is recorded as an operating lease with the escalating rents being recognized on a straight-line basis once the Tenant took full possession of the space on May 1, 2015 through the end of the lease on December 31, 2024. The straight line rents of $53 per month are recorded as a reduction to general and administrative expenses on the Consolidated Statements of Operations and Comprehensive Income (Loss) and other accounts receivable on the Consolidated Balance Sheets. The

cash rent received is recorded in lease rent receivable on the Consolidated Balance Sheets. The variance between the straight line rents recognized and the actual cash rents received will net to zero by the end of the agreement on December 31, 2024.

New Accounting Pronouncements

Effective October 1, 2018, the Company will be required to adopt the new guidance of ASC Topic 606, Revenue from Contracts with Customers (Topic 606), which will supersede the revenue recognition requirements in ASC Topic 605, Revenue Recognition. Topic 606 requires the Company to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The new guidance requires the Company to apply the following steps: (1) identify the contract with a customer; (2) identify the performance obligations in the contract; (3) determine the transaction price; (4) allocate the transaction price to the performance obligations in the contract; and (5) recognize revenue when, or as, the Company satisfies a performance obligation. The Company will be required to adopt Topic 606 either on a full retrospective basis to each prior reporting period presented or on a modified retrospective basis with the cumulative effect of initially applying the new guidance recognized at the date of initial application. If the Company elects the modified retrospective approach, it will be required to provide additional disclosures of the amount by which each financial statement line item is affected in the current reporting period, as compared to the guidance that was in effect before the change, and an explanation of the reasons for significant changes. With the help of external consultants, the Company is in the process of assessing the impact of the new guidance on its consolidated financial statements.

In August 2014, the FASB issued new guidance in Accounting Standards Update (ASU) No. 2014-15, “Presentation of Financial Statements – Going Concern (Subtopic 205-40).” The update provides guidance regarding management’s responsibility to evaluate whether there is substantial doubt about an entity’s ability to continue as a going concern and to provide related footnote disclosures. The Company adopted the guidance in the first quarter of fiscal 2017 and added the required disclosures to the footnotes.

In November 2014, the FASB issued new guidance in ASU No. 2014-16, “Derivatives and Hedging (Topic 815) – Determining whether the host contract in a hybrid financial instrument issued in the form of a share is more akin to debt or to equity.” The guidance clarifies how current GAAP should be interpreted in subjectively evaluating the economic characteristics and risks of a host contract in a hybrid financial instrument that is issued in the form of a share. The Company adopted this guidance with no material effect on the consolidated financial statements.

In February 2015, the FASB amended guidance in ASU No. 2015-02, “Consolidation Topic 810.” The guidance made certain targeted revisions to various area of the consolidation guidance, including the determination of the primary beneficiary of an entity, among others. The Company adopted this guidance in the first fiscal quarter of 2017 with no material effect on the consolidated financial statements.

In April 2015, the FASB amended the existing accounting standards for imputation of interest. The amendments require that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The recognition and measurement guidance for debt issuance costs are not affected by these amendments. The Company adopted the guidance in the first quarter of fiscal 2017, presenting the remaining debt issuance costs at September 30, 2017 and 2016 of $64 and $10, respectively, as a reduction in the carrying amount of the long-term debt.

In July 2015, the FASB issued an amendment to the accounting guidance related to the measurement of inventory. The amendment revises inventory to be measured at lower of cost and net realizable value from lower of cost or market. Subsequent measurement is unchanged for inventory measured using last-in, first-out (LIFO) or the retail inventory method. This guidance will be effective prospectively for the first quarter of fiscal 2018. We are currently evaluating the impact that this guidance will have on our consolidated financial statements.

In February 2016, the FASB issued updated guidance on leases which, for operating leases, requires a lessee to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in its balance sheet. The standard also requires a lessee to recognize a single lease cost, calculated so that the cost of the lease is allocated over the lease term, on a generally straight-line basis. The guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, with earlier application permitted. We are currently evaluating the effects of the adoption and have not yet determined the impact the revised guidance will have on our consolidated financial statements and related disclosures.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230), which addresses eight specific cash flow issues and is intended to reduce diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The guidance is effective for interim and annual periods beginning after December 15, 2017, and early adoption is permitted. The adoption of this guidance is not expected to have a material impact on our consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, Simplifying the Test for Goodwill Impairment. ASU 2017-04 simplifies the accounting for goodwill impairments by eliminating Step 2 from the goodwill impairment test. Under the previous guidance an impairment of goodwill exists when the carrying amount of goodwill exceeds its implied fair value, whereas under the new guidance a goodwill impairment loss would be recognized if the carrying amount of the reporting unit exceeds its fair value, limited to the total amount of goodwill allocated to that reporting unit. The ASU is effective for annual and any interim impairment tests for periods beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. We are currently evaluating the impact this standard will have on our consolidated financial statements.

In January 2017, the FASB issued ASU 2017-01, *Business Combinations – Clarifying the definition of a business* (Topic 805). This ASU clarifies the definition of a business with the objective of providing a more robust framework to evaluate whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The guidance will be effective for fiscal years beginning after December 15, 2017, including interim periods within that fiscal year, with early adoption permitted. The amendments are to be applied prospectively to business combinations that occur after the effective date.

ITEM 7A–QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

ITEM 8–FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements

BIOANALYTICAL SYSTEMS, INC.

CONSOLIDATED BALANCE SHEETS

(In thousands, except share amounts)

	As of September 30,	
	2017	2016
Assets		
Current assets:		
Cash and cash equivalents	$434	$386
Accounts receivable		
Trade, net of allowance of $2,404 at September 30, 2017 and $565 at September 30, 2016	2,530	1,649
Unbilled revenues and other	615	591
Inventories, net	913	1,453
Prepaid expenses	814	798
Total current assets	5,306	4,877
Property and equipment, net	14,965	16,136
Lease rent receivable	87	51
Goodwill	38	38
Other assets	21	27
Total assets	$20,417	$21,129
Liabilities and shareholders' equity		
Current liabilities:		
Accounts payable	$2,052	$2,965
Restructuring liability	1,117	1,117
Accrued expenses	1,202	1,089
Customer advances	2,980	3,114
Income taxes payable	20	13
Revolving line of credit	—	1,358
Fair value of interest rate swap	—	35
Current portion of capital lease obligation	128	126
Current portion of long-term debt	224	3,656
Total current liabilities	7,723	13,473
Capital lease obligation, less current portion	69	198
Long-term debt, less current portion, net of debt issuance costs	4,158	—
Total liabilities	11,950	13,671
Shareholders' equity:		
Preferred shares, authorized 1,000,000 shares, no par value:		
	1,035	1,185

1,035 Series A shares at $1,000 stated value issued and outstanding at September 30, 2017 and 1,185 at September 30, 2016		
Common shares, no par value:		
Authorized 19,000,000 shares; 8,243,896 issued and outstanding at September 30, 2017 and 8,107,558 at September 30, 2016	2,023	1,989
Additional paid-in capital	21,446	21,240
Accumulated deficit	(16,037)	(16,921)
Accumulated other comprehensive (loss) income	—	(35)
Total shareholders' equity	8,467	7,458
Total liabilities and shareholders' equity	$20,417	$21,129

The accompanying notes are an integral part of the consolidated financial statements.

BIOANALYTICAL SYSTEMS, INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

AND COMPREHENSIVE INCOME (LOSS)
(In thousands, except per share amounts)

	For the Years Ended September 30,	
	2017	2016
Services revenue	$ 20,182	$ 15,924
Products revenue	4,060	4,517
Total revenue	24,242	20,441
Cost of services revenue	13,990	13,355
Cost of products revenue	2,555	2,661
Total cost of revenue	16,545	16,016
Gross profit	7,697	4,425
Operating expenses:		
Selling	1,053	1,417
Research and development	465	496
General and administrative	4,901	4,581
Impairment of goodwill	—	971
Total operating expenses	6,419	7,465
Operating income (loss)	1,278	(3,040)
Interest expense	(375)	(399)
Decrease in fair value of warrant liability	—	189
Other income	5	6
Income (loss) before income taxes	908	(3,244)
Income tax expense (benefit)	24	(14)
Net income (loss)	$ 884	$ (3,230)
Other comprehensive income (loss) :	35	(88)
Comprehensive income (loss)	$ 919	$ (3,318)
Basic net income (loss) per share:	$ 0.11	$ (0.40)
Diluted net income (loss) per share:	$ 0.10	$ (0.40)

Weighted common shares outstanding:		
Basic	8,178	8,107
Diluted	8,733	8,107

The accompanying notes are an integral part of the consolidated financial statements.

BIOANALYTICAL SYSTEMS, INC.

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(In thousands, except number of shares)

	Preferred Shares		Common Shares		Additional paid-in	Accumulated	Accumulated other comprehensive income (loss)	Total shareholder's equity
	Number	Amount	Number	Amount	capital	deficit		
Balance at October 1, 2015	1,185	$ 1,185	8,105,007	$ 1,988	$ 21,193	$ (13,691)	$ 53	$ 10,728
Comprehensive loss:								
Net income						(3,230)		(3,230)
Other comprehensive income							(88)	(88)
Stock based compensation expense					45			45
Stock option exercise	-	-	2,551	1	2			3
Balance at September 30, 2016	1,185	$ 1,185	8,107,558	$ 1,989	$ 21,240	$ (16,921)	$ (35)	$ 7,458
Comprehensive income:								
Net income						884		884
Other comprehensive income							35	35
Stock based compensation expense					19			19
Stock option exercise			61,338	15	56			71
Conversion of preferred shares to common shares	(150)	(150)	75,000	19	131			-
Balance at September 30, 2017	1,035	$ 1,035	8,243,896	$ 2,023	$ 21,446	$ (16,037)	$ -	$ 8,467

The accompanying notes are an integral part of the consolidated financial statements.

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BIOANALYTICAL SYSTEMS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

	Years Ended September 30,	
	2017	2016
Operating activities:		
Net income (loss)	$ 884	$ (3,230)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization	1,680	1,556
Employee stock compensation expense	19	45
Decrease in fair value of warrant liability	—	(189)
(Gain)/Loss on sale of property and equipment	(5)	14
Provision for doubtful accounts	—	84
Impairment of goodwill	—	971
Changes in operating assets and liabilities:		
Accounts receivable	(941)	1,639
Inventories	540	13
Income taxes payable	7	(17)
Prepaid expenses and other assets	(14)	(27)
Accounts payable	(913)	1,122
Accrued expenses	113	(621)
Customer advances	(134)	(300)
Net cash provided by operating activities	$ 1,236	1,060
Investing activities:		
Capital expenditures	(347)	(1,256)
Proceeds from sale of equipment	8	—
Net cash used by investing activities	(339)	(1,256)
Financing activities:		
Payments of long-term debt	(3,721)	(786)
New borrowings on long-term debt	4,500	—
Payments of debt issuance costs	(214)	(68)
Proceeds from exercise of stock options	71	3
Payments on revolving line of credit	(11,516)	(11,304)
Borrowings on revolving line of credit	10,158	12,576
Payments on capital lease obligations	(127)	(277)
Net cash (used) provided by financing activities	(849)	144
Net increase (decrease) in cash and cash equivalents	48	(52)
Cash and cash equivalents at beginning of year	386	438
Cash and cash equivalents at end of year	$ 434	$ 386

Supplemental disclosure of cash flow information:		
Cash paid for interest	$ 230	$ 312
Supplemental disclosure of non-cash financing activities:		
Equipment financed under capital leases	$ —	$ 303

The accompanying notes are an integral part of the consolidated financial statements.

BIOANALYTICAL SYSTEMS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(Amounts in thousands unless otherwise indicated)

1. DESCRIPTION OF THE BUSINESS AND BASIS OF PRESENTATION

Bioanalytical Systems, Inc. and its subsidiaries ("We," "Our," "Us," the "Company" or "BASi") engage in contract laboratory research services and other services related to pharmaceutical development. We also manufacture scientific instruments for life sciences research, which we sell with related software for use by pharmaceutical companies, universities, government research centers and medical research institutions. Our customers are located throughout the world.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries. All significant inter-company accounts and transactions have been eliminated.

(b) Revenue Recognition

The majority of our bioanalytical and analytical research service contracts involve the development of analytical methods and the processing of bioanalytical samples for pharmaceutical companies and generally provide for a fixed fee for each sample processed. Revenue is recognized under the specific performance method of accounting and the related direct costs are recognized when services are performed. Our preclinical research service contracts generally consist of preclinical studies, and revenue is recognized under the proportional performance method of accounting. Revisions in profit estimates, if any, are reflected on a cumulative basis in the period in which such revisions become known. The establishment of contract prices and total contract costs involves estimates we make at the inception of the contract. These estimates could change during the term of the contract and impact the revenue and costs reported in the consolidated financial statements. Revisions to estimates have generally not been material. Research service contract fees received upon acceptance are deferred until earned, and classified within customer advances. Unbilled revenues represent revenues earned under contracts in advance of billings.

Beginning in calendar year 2017, we began to recognize archive revenue when the following criteria are met: (1) persuasive evidence of an arrangement exists; (2) services have been rendered; (3) the invoice price is fixed or determinable; and (4) collectability of the resulting receivable is reasonably assured. Archiving revenues are recognized in the month the service is provided, and customers are generally billed on a monthly basis on contractually agreed-upon terms. Amounts related to future archiving or prepaid archiving contracts for customers where archiving fees are billed in advance are accounted for as deferred revenue and recognized ratably over the period the applicable archive service is performed. For archiving revenues that were billed for services rendered prior to calendar year 2017, revenue is recognized when the invoice is paid by the customer.

Product revenue from sales of equipment not requiring installation, testing or training is recognized upon shipment to customers. One product includes internally developed software and requires installation, testing and training, which occur concurrently. Revenue from these sales is recognized upon completion of the installation, testing and training when the services are bundled with the equipment sale.

(c) *Cash Equivalents*

We consider all highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents. At September 30, 2017, we did not have any cash accounts that exceeded federally insured limits.

(d) *Accounts Receivable*

We perform periodic credit evaluations of our customers' financial conditions and generally do not require collateral on trade accounts receivable. We account for trade receivables based on the amounts billed to customers. Past due receivables are determined based on contractual terms. We do not accrue interest on any of our trade receivables. The allowance for doubtful accounts is determined by management based on our historical losses, specific customer circumstances, and general economic conditions. Periodically, management reviews accounts receivable and adjusts the allowance based on current circumstances and charges off uncollectible receivables when all attempts to collect have failed. Our allowance for doubtful accounts was $2,404 and $565 at September 30, 2017 and 2016, respectively. The increase in fiscal 2017 stemmed from the uncollected archive invoices from the first quarter of fiscal 2017. Until these are collected, they are not recorded as earned revenue and will remain in the reserve. A summary of activity in our allowance for doubtful accounts is as follows:

	Fiscal year ended September 30,	
	2017	2016
Opening balance	$ 565	$ 559
Charged to expense	—	84
Accounts recovered	—	(25)
Accounts written off	—	(53)
Uncollected archive invoices	1,839	—
Ending balance	$ 2,404	$ 565

(e) *Inventories*

Inventories are stated at the lower of cost or market using the first-in, first-out (FIFO) cost method of accounting. We evaluate inventories on a regular basis to identify inventory on hand that may be obsolete or in excess of current and future projected market demand. For inventory deemed to be obsolete, we provide a reserve. Inventory that is in excess of current and projected use is reduced by an allowance to a level that approximates the estimate of future demand. A summary of activity in our inventory obsolescence is as follows for the years ended September 30, 2017 and 2016:

	Fiscal year ended September 30,	
	2017	2016
Opening balance	$ 288	$ 301
Provision for slow moving and obsolescence	92	21
Write-off of obsolete and slow moving inventory	(169)	(34)
Closing balance	$ 211	$ 288

(f) *Property and Equipment*

We record property and equipment at cost, including interest capitalized during the period of construction of major facilities. We compute depreciation, including amortization on capital leases, using the straight-line method over the estimated useful lives of the assets, which we estimate to be: buildings and improvements, 34 to 40 years; machinery and equipment, 5 to 10 years, and office furniture and fixtures, 10 years. Expenditures for maintenance and repairs are expensed as incurred unless the life of the asset is extended beyond one year, which would qualify for asset treatment. Depreciation expense was $1,515 in fiscal 2017 and $1,398 in fiscal 2016. Property and equipment, net, as of September 30, 2017 and 2016 consisted of the following:

	2017	2016
Land and improvements	$1,001	$1,043
Buildings and improvements	22,090	21,943
Machinery and equipment	19,059	18,568
Office furniture and fixtures	638	645
Construction in progress	57	603
	42,845	42,802
Less: accumulated depreciation	(27,880)	(26,666)
Net property and equipment	$14,965	$16,136

(g) *Long-Lived Assets including Goodwill*

Long-lived assets, such as property and equipment, and purchased intangibles subject to amortization, are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future cash flows, an impairment charge is recognized of the amount by which the carrying amount of the asset exceeds the fair value of the asset.

We carry goodwill at cost. Other intangible assets with definite lives are stated at cost and are amortized on a straight-line basis over their estimated useful lives. All intangible assets acquired that are obtained through contractual or legal right, or are capable of being separately sold, transferred, licensed, rented, or exchanged, are recognized as an asset apart from goodwill. Goodwill is not amortized.

Goodwill is tested annually for impairment and more frequently if events and circumstances indicate that the asset might be impaired. First, we can assess qualitative factors in determining whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. We elected to bypass the qualitative assessment aspect of

this guidance. We proceeded directly to a two-step quantitative process. In the first step, we compare the fair value of each reporting unit, as computed primarily by present value cash flow calculations, to its book carrying value, including goodwill. We do not believe that market value is indicative of the true fair value of the Company mainly due to average daily trading volumes of less than 1%. If the fair value exceeds the carrying value, no further work is required and no impairment loss is recognized. If the carrying value exceeds the fair value, the goodwill of the reporting unit is potentially impaired and we would then complete step 2 in order to measure the impairment loss. In step 2, the implied fair value is compared to the carrying amount of the goodwill. If the implied fair value of goodwill is less than the carrying value of goodwill, we would recognize an impairment loss equal to the difference. The implied fair value is calculated by allocating the fair value of the reporting unit (as determined in step 1) to all of its assets and liabilities (including unrecognized intangible assets) and any excess in fair value that is not assigned to the assets and liabilities is the implied fair value of goodwill.

The discount rate, gross margin and sales growth rates are material assumptions utilized in our calculations of the present value cash flows used to estimate the fair value of the reporting unit when performing the annual goodwill impairment test. Our reporting unit with goodwill at September 30, 2017 was preclinical services, which is included in our Services segment, based on the discrete financial information available which is reviewed by management. We utilize a cash flow approach in estimating the fair value of the reporting unit, where the discount rate reflects a weighted average cost of capital rate. The cash flow model used to derive fair value is sensitive to the discount rate and sales growth assumptions used.

We performed our annual goodwill impairment test for the Preclinical Services reporting unit at September 30, 2017 and there was no indication of impairment.

Considerable management judgment is necessary to evaluate the impact of operating and macroeconomic changes and to estimate future cash flows. Assumptions used in our impairment evaluations, such as forecasted sales growth rates and our cost of capital or discount rate, are based on the best available market information. Changes in these estimates or a continued decline in general economic conditions could change our conclusion regarding an impairment of goodwill and potentially result in a non-cash impairment loss in a future period. The assumptions used in our impairment testing could be adversely affected by certain risks. There have been no significant events since the timing of our impairment tests that would have triggered additional impairment testing.

At September 30, 2017 and 2016, respectively, the remaining recorded goodwill was $38. We amortize costs of patents and licenses, which are included in other assets on the Consolidated Balance Sheets. For the fiscal years ended September 30, 2017 and 2016, the amortization expense associated with these was $6 and $5, respectively.

(h) *Stock-Based Compensation*

We have a stock-based employee compensation plan and a stock-based employee and outside director compensation plan, which are described more fully in Note 9. All options granted under these plans have an exercise price equal to the market value of the underlying common shares on the date of grant. We expense the estimated fair value of stock options over the vesting periods of the grants. Our policy is to recognize expense for awards subject to graded vesting using the straight-line attribution method, reduced for estimated forfeitures.

We use a binomial option-pricing model as our method of valuation for share-based awards, requiring us to make certain assumptions about the future, which are more fully described in Note 9.

(i) *Income Taxes*

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

We may recognize the tax benefit from an uncertain tax position only if it is more likely than not to be sustained upon examination based on the technical merits of the position. The amount of the accrual for which an exposure exists is measured as the largest amount of benefit determined on a cumulative probability basis that we believe is more likely than not to be realized upon settlement of the position.

We record interest and penalties accrued in relation to uncertain income tax positions as a component of income tax expense. Any changes in the liability for uncertain tax positions would impact our effective tax rate. We do not expect the total amount of unrecognized tax benefits to significantly change in the next twelve months.

(j) *Fair Value of Financial Instruments*

The provisions of the Fair Value Measurements and Disclosure Topic defines fair value, establishes a consistent framework for measuring fair value and provides the disclosure requirements about fair value measurements. This Topic also establishes a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs that market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company’s judgment about the assumptions market participants would use in pricing the asset or liability based on the best information available in the circumstances. The hierarchy is broken down into three levels based on the inputs as follows:

- Level 1 – Valuations based on quoted prices for identical assets or liabilities in active markets that the Company has the ability to access.

- Level 2 – Valuations based on quoted prices in markets that are not active or for which all significant inputs are observable, either directly or indirectly.

- Level 3 – Valuations based on inputs that are unobservable and significant to the overall fair value measurement.

The carrying amounts for cash and cash equivalents, accounts receivable, inventories, prepaid expenses and other assets, accounts payable and other accruals approximate their fair values because of their nature and respective duration. The carrying value of the credit facility entered into in fiscal 2017 approximates fair value since it was signed within the most recent fiscal year.

We used an interest rate swap, designated as a hedge, to fix 60% of the debt from our Huntington credit facility. We did not enter into this derivative transaction to speculate on interest rates, but to hedge interest rate risk. The swap was recognized on the balance sheet at its fair value. The fair value was determined utilizing a cash flow model that takes into consideration interest rates and other inputs observable in the market from similar types of instruments, and was therefore considered a level 2 measurement. The interest rate swap was terminated as a result of the new credit facility described in Note 7 and the balance was reduced to zero.

As of September 30, 2017, the Company did not have any financial assets or liabilities measured at fair value on a recurring basis. The following table summarizes fair value measurements by level as of September 30, 2016, for the Company’s financial liabilities measured at fair value on a recurring basis:

	Level 1	Level 2	Level 3
Interest rate swap agreement	$ -	$ 35	$ -
Class A warrant liability	$ -	$ -	$ -

(k) *Use of Estimates*

The preparation of financial statements in conformity with generally accepted accounting principles requires us to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Significant estimates as part of the issuance of these consolidated financial statements include but are not limited to the determination of fair values, allowance for doubtful accounts, inventory obsolescence, deferred tax valuations, depreciation, impairment charges and stock compensation. Our actual results could differ

from those estimates.

(l) *Research and Development*

In fiscal 2017 and 2016, we incurred $465 and $496, respectively, on research and development. Separate from our contract research services business, we maintain applications research and development to enhance our products business. We expense research and development costs as incurred.

(m) Interest Rate Swap

The Company used an interest rate swap designated as a cash flow hedge to fix the interest rate on 60% of its prior debt with Huntington Bank due to changes in interest rates. The changes in the fair value of the interest rate swap were recorded in Accumulated Other Comprehensive Income ("AOCI") to the extent effective. We assessed on an ongoing basis whether the derivative that was used in the hedging transaction was highly effective in offsetting changes in cash flows of the hedged debt. The terms of the interest rate swaps matched the terms of the underlying debt resulting in no ineffectiveness. When we determine that a derivative is not highly effective as a hedge, hedge accounting would be discontinued and we would have reclassified gains or losses that were accumulated in AOCI to other income (expense), net on the Condensed Consolidated Statements of Operations and Comprehensive Income (Loss). The interest rate swap was terminated as a result of the new credit facility in Note 7 below and the balance was reduced to zero as of June 30, 2017. The balance in AOCI at September 30, 2017 and 2016 was $0 and $(35), respectively.

(n) Debt issuance costs

The Company capitalizes costs associated with the issuance of debt and amortizes them as additional interest expense over the lives of the debt on a straight-line basis, which approximates the effective interest method. The Company believes the difference between the straight-line basis and the effective interest method is not material to the consolidated financial statements. Debt issuance costs of $64 and $10, as of September 30, 2017 and 2016, respectively, were netted with long-term debt less current portion on the consolidated balance sheets. Upon prepayment of the related debt, the Company accelerates the recognition of an appropriate amount of the costs as refinancing or extinguishment of debt.

(o) Reclassifications

Certain amounts in the fiscal 2016 consolidated financial statements have been reclassified to conform to the fiscal 2017 presentation without affecting previously reported net income or stockholders' equity.

(p) New Accounting Pronouncements

Effective October 1, 2018, the Company will be required to adopt the new guidance of ASC Topic 606, Revenue from Contracts with Customers (Topic 606), which will supersede the revenue recognition requirements in ASC Topic 605, Revenue Recognition. Topic 606 requires the Company to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The new guidance requires the Company to apply the following steps: (1) identify the contract with a customer; (2) identify the performance obligations in the contract; (3) determine the

transaction price; (4) allocate the transaction price to the performance obligations in the contract; and (5) recognize revenue when, or as, the Company satisfies a performance obligation. The Company will be required to adopt Topic 606 either on a full retrospective basis to each prior reporting period presented or on a modified retrospective basis with the cumulative effect of initially applying the new guidance recognized at the date of initial application. If the Company elects the modified retrospective approach, it will be required to provide additional disclosures of the amount by which each financial statement line item is affected in the current reporting period, as compared to the guidance that was in effect before the change, and an explanation of the reasons for significant changes. With the help of external consultants, the Company is in the process of assessing the impact of the new guidance on its consolidated financial statements.

In August 2014, the FASB issued new guidance in Accounting Standards Update (ASU) No. 2014-15, “Presentation of Financial Statements – Going Concern (Subtopic 205-40).” The update provides guidance regarding management’s responsibility to evaluate whether there is substantial doubt about an entity’s ability to continue as a going concern and to provide related footnote disclosures. The Company adopted the guidance in the first quarter of fiscal 2017 and added the required disclosures to the footnotes.

In November 2014, the FASB issued new guidance in ASU No. 2014-16, “Derivatives and Hedging (Topic 815) – Determining whether the host contract in a hybrid financial instrument issued in the form of a share is more akin to debt or to equity.” The guidance clarifies how current GAAP should be interpreted in subjectively evaluating the economic characteristics and risks of a host contract in a hybrid financial instrument that is issued in the form of a share. The Company adopted this guidance with no material effect on the consolidated financial statements.

In February 2015, the FASB amended guidance in ASU No. 2015-02, “Consolidation Topic 810.” The guidance made certain targeted revisions to various area of the consolidation guidance, including the determination of the primary beneficiary of an entity, among others. The Company adopted this guidance in the first fiscal quarter of 2017 with no material effect on the consolidated financial statements.

In April 2015, the FASB amended the existing accounting standards for imputation of interest. The amendments require that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The recognition and measurement guidance for debt issuance costs are not affected by these amendments. The Company adopted the guidance in the first quarter of fiscal 2017, presenting the remaining debt issuance costs at September 30, 2017 and 2016 of $64 and $10, respectively, as a reduction in the carrying amount of the long-term debt.

In July 2015, the FASB issued an amendment to the accounting guidance related to the measurement of inventory. The amendment revises inventory to be measured at lower of cost and net realizable value from lower of cost or market. Subsequent measurement is unchanged for inventory measured using last-in, first-out (LIFO) or the retail inventory method. This guidance will be effective prospectively for the first quarter of fiscal 2018. We are currently evaluating the impact that this guidance will have on our consolidated financial statements.

In February 2016, the FASB issued updated guidance on leases which, for operating leases, requires a lessee to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in its balance sheet. The standard also requires a lessee to recognize a single lease cost, calculated so that the cost of the lease is allocated over the lease term, on a generally straight-line basis. The guidance is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years, with earlier application permitted. We are currently evaluating the effects of the adoption and have not yet determined the impact the revised guidance will have on our consolidated financial statements and related disclosures.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230), which addresses eight specific cash flow issues and is intended to reduce diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. The guidance is effective for interim and annual periods beginning after December 15, 2017, and early adoption is permitted. The adoption of this guidance is not expected to have a material impact on our consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, Simplifying the Test for Goodwill Impairment. ASU 2017-04 simplifies the accounting for goodwill impairments by eliminating Step 2 from the goodwill impairment test. Under the previous guidance an impairment of goodwill exists when the carrying amount of goodwill exceeds its implied fair value, whereas under the new guidance a goodwill impairment loss would be recognized if the carrying amount of the reporting unit exceeds its fair value, limited to the total amount of goodwill allocated to that reporting unit. The ASU is effective for annual and any interim impairment tests for periods beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. We are currently evaluating the impact this standard will have on our consolidated financial statements.

In January 2017, the FASB issued ASU 2017-01, *Business Combinations – Clarifying the definition of a business* (Topic 805). This ASU clarifies the definition of a business with the objective of providing a more robust framework to evaluate whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. The guidance will be effective for fiscal years beginning after December 15, 2017, including interim periods within that fiscal year, with early adoption permitted. The amendments are to be applied prospectively to business combinations that occur after the effective date.

3.SALE OF PREFERRED SHARES AND WARRANTS (not in thousands)

On May 11, 2011, we completed a registered public offering of 5,506 units at a price of $1,000 per unit. Each unit consisted of one 6% Series A convertible preferred share which is convertible into 500 common shares, one Class A Warrant to purchase 250 common shares at an exercise price of $2.00 per share, and one Class B Warrant to purchase 250 common shares at an exercise price of $2.00 per share. The Class B Warrants expired in May 2012 and the liability was reduced to zero and the Class A Warrants expired in May 2016 and the liability was reduced to zero.

The Series A preferred shares were valued using the common shares available upon conversion of all preferred shares of 2,753,000 and the closing market price of our stock on May 11, 2011 of $1.86. As of September 30, 2017, 4,471 preferred shares have been converted into 2,639,108 common shares and 217,366 common shares have been issued for quarterly preferred dividends for remaining outstanding, unconverted preferred shares. As of September 30, 2017, 577,897 warrants have been exercised. At September 30, 2017, 1,035 preferred shares remained outstanding. All dividends have been paid according to the agreement.

For the year ended September 30, 2016, the Company recognized income of $189 due to the change in the estimated fair value of the Company's warrants. This income was recorded as a decrease in fair value of warrant liability on the Company's consolidated statements of operations and comprehensive income (loss) for the respective periods.

4. INCOME (LOSS) PER SHARE

We compute basic income (loss) per share using the weighted average number of common shares outstanding. The Company has two categories of dilutive potential common shares: the Series A preferred shares issued in May 2011 in connection with the registered direct offering and shares issuable upon exercise of options. We compute diluted earnings per share using the if-converted method for preferred stock and the treasury stock method for stock options, respectively. Shares issuable upon exercise of 209 vested options and 592 common shares issuable upon conversion of preferred shares were not considered in computing diluted income (loss) per share for the year ended September 30, 2016, because they were anti-dilutive.

The following table reconciles our computation of basic net income (loss) per share to diluted net income (loss) per share:

	Years Ended September 30,	
	2017	**2016**
Basic net income (loss) per share:		
Net income (loss) applicable to common shareholders	$ 884	$ (3,230)
Weighted average common shares outstanding	8,178	8,107
Basic net income (loss) per share	$ 0.11	$ (0.40)
Diluted net income (loss) per share:		
Diluted net income (loss) applicable to common shareholders	$ 884	$ (3,230)
Weighted average common shares outstanding	8,178	8,107
Plus: Incremental shares from assumed conversions:		

Series A preferred shares	545	—
Dilutive stock options/shares	10	—
Diluted weighted average common shares outstanding	8,733	8,107
Diluted net income (loss) per share	$ 0.10	$ (0.40)

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5. INVENTORIES

Inventories at September 30 consisted of the following:

	2017	2016
Raw materials	$761	$1,190
Work in progress	135	267
Finished goods	228	284
	$1,124	$1,741
Obsolescence reserve	(211)	(288)
	$913	$1,453

6. LEASE ARRANGEMENTS

The total amount of equipment capitalized under capital lease obligations as of September 30, 2017 and 2016 was $6,195. Accumulated amortization on capital leases at September 30, 2017 and 2016 was $6,007 and $5,880, respectively. Amortization of assets acquired through capital leases is included in depreciation expense.

In fiscal 2016, we had two new capital lease additions of $303 for laboratory software at our West Lafayette facility. Future minimum lease payments on capital leases at September 30, 2017 for the next five years are as follows:

	Principal	Interest	Total
2018	$ 129	$ 7	$136
2019	68	1	69
2020	—	—	—
2021	—	—	—
2022	—	—	—
	$ 197	$ 8	$205

We lease office space and equipment under non-cancelable operating leases that terminate at various dates through 2021. Certain of these leases contain renewal options. Total rental expense under these leases was $78 and $96 in fiscal 2017 and 2016, respectively. The UK building lease discussed in Note 12 expires in 2023 but includes an opt out provision after 7 years, which occurred in our fourth fiscal quarter of 2015 and was exercised.

Future minimum lease payments, exclusive of rent related to the UK restructuring discussed in Note 13, for the following fiscal years under operating leases at September 30, 2017 are as follows:

2018	$24
2019	24
2020	19
2021	7
2022	—
	$74

We lease a portion of our headquarters' building in West Lafayette, Indiana to Cook Biotech, Inc. (Tenant) as part of the Lease Agreement signed in January 2015. The Lease Agreement has an initial term ending December 31, 2024 with escalating rents each year. The Tenant took full possession of the space on May 1, 2015. We recognize the escalating rents on a straight-line basis as a reduction to general and administrative expenses on the Consolidated Statements of Operations and Comprehensive Income (Loss) and lease rent receivable on the Consolidated Balance Sheets. The cash rent received is recorded to the customer account and as a reduction to the other accounts receivable on the Consolidated Balance Sheets. The variance between the straight line rents recognized and the actual cash rents received will net to zero in other accounts receivable by the end of the agreement on December 31, 2024. As of September 30, 2017, the rents recognized amounted to $1,536 and cash rent received amounted to $1,449. Future rental income recognized and cash rents received for the next five years are as follows:

	Straight line rents to be recognized	Cash rent to be received
2018	$ 636	$ 609
2019	636	621
2020	636	633
2021	636	646
2022	636	659
	$ 3,180	$ 3,168

7. DEBT ARRANGEMENTS

Long-term debt consisted of the following at September 30:

	2017	2016
Term loan payable to a bank, payable in monthly principal installments of $65. Interest is variable at LIBOR plus 325 basis points, which was 3.4 % at September 30, 2016. Collateralized by underlying property. Due July 31, 2017.	$—	$3,666
Term loan payable to a bank, payable in monthly principal and interest installments of $33. Interest is fixed at 3.99%. Collateralized by underlying property. Due June 23, 2022.	4,446	—
Less: Current portion	224	3,666
Long term total	$4,222	$—

Cash interest payments of $230 and $312 were made in 2017 and 2016, respectively. The following table summarizes the annual principal payments under our term loan:

	2018	2019	2020	2021	2022	Total
Term loan	$224	$233	$242	$252	$3,495	$4,446

New Credit Facility

On June 23, 2017, we entered into a new Credit Agreement (the "Credit Agreement") with First Internet Bank of Indiana ("FIB"). The Credit Agreement includes both a term loan and a revolving line of credit and is secured by mortgages on our facilities and personal property in West Lafayette and Evansville, Indiana. We used the proceeds from the term loan to satisfy our indebtedness with Huntington Bank described below and terminated the related interest rate swap.

The term loan for $4,500 bears interest at a fixed rate of 3.99%, with monthly principal and interest payments of approximately $33. The term loan matures in June 2022. The balance on the term loan at September 30, 2017 was $4,446. The revolving line of credit for up to $2,000 matures in June 2019 and bears interest at the Prime Rate (generally defined as the highest rate identified as the "Prime Rate" in The Wall Street Journal "Money Rates" column on the date the interest rate is to be determined, or if that date is not a publication date, on the publication date immediately preceding) less Twenty-five (25) Basis Points (0.25%). The balance on the revolving line of credit at September 30, 2017 was $0. We must pay accrued and unpaid interest on the outstanding balance under the credit line on a monthly basis.

The Credit Agreement contains various restrictive covenants, including restrictions on the Company's ability to dispose of assets, make acquisitions or investments, incur debt or liens, make distributions to shareholders or repurchase outstanding stock, enter into related party transactions and make capital expenditures, other than upon satisfaction of the conditions set forth in the Credit Agreement. The Credit Agreement also requires us to maintain (i) a minimum debt service coverage ratio of not less than 1.20 to 1.00 for the quarters ending September 30, 2017 and December 31, 2017 and of not less than 1.25 to 1.0 for the quarters thereafter and (ii) beginning with the fourth quarter of fiscal 2017 ending September 30, 2017, a debt to equity ratio of not greater than 2.50 to 1.00 until maturity. Upon an event of default, which includes certain customary events such as, among other things, a failure to make required payments when due, a failure to comply with covenants, certain bankruptcy and insolvency events, and defaults under other material indebtedness, FIB may cease advancing funds, increase the interest rate on outstanding balances, accelerate amounts outstanding, terminate the agreement and foreclose on all collateral.

We incurred $69 of costs in June 2017 related to the Credit Agreement that was partially amortized in the third and fourth fiscal quarters of 2017 with the remainder to be amortized through June 2022.

Credit Facility

On May 14, 2014, we entered into a Credit Agreement with Huntington Bank, which was subsequently amended on May 14, 2015 ("Agreement"). The Agreement included both a term loan and a revolving loan and was secured by

mortgages on our facilities in West Lafayette and Evansville, Indiana and liens on our personal property. As of December 31, 2015, we were not in compliance with certain financial covenants of the Agreement, and during fiscal 2016 and most of the first nine months of fiscal 2017 we operated either in default of, or under forbearance arrangements with respect to, the Agreement.

Under a series of forbearance arrangements, Huntington Bank agreed during the relevant forbearance periods to forbear from exercising its rights and remedies under the Agreement and from terminating the Company's related swap agreement with respect to the Company's non-compliance with applicable financial covenants under the Agreement and to continue to make advances under the Agreement.

In exchange for Huntington Bank's agreement to forbear from exercising its rights and remedies under the Agreement, the Company agreed to, among other things: (i) amend the maturity dates for the term and revolving loans under the Agreement (the last such amendment to July 31, 2017), (ii) take commercially reasonable efforts to obtain funds sufficient to repay the indebtedness in full upon the expiration of the forbearance periods, (iii) provide to Huntington Bank certain cash flow forecasts and other financial information, (iv) comply with a minimum cash flow covenant, (v) engage the services of a financial consultant and cause the financial consultant to provide Huntington Bank such information regarding its efforts as reasonably requested, and (vi) pay to Huntington Bank certain fees, including a forbearance fee in the amount of $227, $27 of which was paid at the execution of the last forbearance agreement, with the remainder payable upon the first to occur of payment in full of the indebtedness under the Credit Agreement or July 14, 2017. The agreement provided that should the Company repay the indebtedness to Huntington Bank in full on or before July 14, 2017, the forbearance fee would be reduced by $100. Because we believed that it was more likely than not that we would have to pay the full fee of $200, we accrued for the fees from the last forbearance agreement net of accumulated amortization in the Term loan, net of debt issuance costs on the condensed consolidated balance sheets in the second fiscal quarter of 2017. This accrual was reduced by $100 in the third quarter of fiscal 2017 because the loan to Huntington Bank was paid in full prior to July 14, 2017.

We incurred a total of $56 of costs related to certain of our forbearance arrangements that was amortized in the first, second and third quarters of fiscal 2017.

Interest Rate Swap

We entered into an interest rate swap agreement with respect to the loans with Huntington Bank to fix the interest rate with respect to 60% of the value of the term loan at approximately 5.0%. We entered into this interest rate swap agreement to hedge interest rate risk of the related debt obligation and not to speculate on interest rates. The changes in the fair value of the interest rate swap were recorded in Accumulated Other Comprehensive Income to the extent effective. The interest rate swap was terminated as a result of the new credit facility described above and the balance was reduced to zero as of September 30, 2017.

For the fiscal years ended September 30, 2017 and 2016, respectively, we amortized $160 and $153 into interest expense on the condensed consolidated statements of operations and comprehensive income (loss). These noncash charges are included in depreciation and amortization on the consolidated statements of cash flows. As of September 30, 2017 and 2016, the unamortized portion of debt issuance costs related to our respective credit facilities was $64 and $10, respectively, and was included in Long-term Debt, less current portion on the condensed consolidated balance sheets.

8. INCOME TAXES

Significant components of our deferred tax assets and liabilities as of September 30 are as follows:

	2017	2016
Deferred tax assets:		
Inventory	$137	$209
Accrued compensation and vacation	169	90
Accrued expenses and other	357	427
Domestic net operating loss carryforwards	5,142	5,365
Stock compensation expense	9	19
AMT credit carryover	76	55
Total deferred tax assets	5,890	6,165
Deferred tax liabilities:		
Prepaid expenses	(128)	(64)
Unrealized gain/loss - warrant liability	—	—
Basis difference for fixed assets	(383)	(412)
Total deferred tax liabilities	(511)	(476)
Total net deferred tax assets	5,379	5,689
Valuation allowance for net deferred tax assets	(5,379)	(5,689)
Net deferred tax asset (liability)	$—	$—

Significant components of the provision (benefit) for income taxes are as follows as of the year ended September 30:

	2017	2016
Current:		
Federal	$ 21	$(20)
State and local	3	6
Deferred:		
Federal	—	—
State and local	—	—
Income tax expense	$ 24	$(14)

The effective income tax rate on continuing operations varied from the statutory federal income tax rate as follows:

	2017	2016
Federal statutory income tax rate	34.0 %	34.0 %
Increases (decreases):		
State and local income taxes, net of Federal tax benefit, if applicable	0.2 %	(0.1)%
Nondeductible goodwill impairment	—	(10.2)%
Other nondeductible expenses	1.3 %	(0.8)%
Valuation allowance changes	(32.9)%	(22.5)%
Effective income tax rate	2.6 %	0.4 %

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In fiscal 2016, an impairment of goodwill in the amount of $971 was recorded that was not deductible for tax purposes. Therefore, no tax benefit was recorded.

Realization of deferred tax assets associated with the net operating loss carryforward and credit carryforward is dependent upon generating sufficient taxable income prior to their expiration. The valuation allowance for our domestic operations in fiscal 2017 and 2016 was $5,379 and $5,689, respectively. Payments made in fiscal 2017 and 2016 for income taxes amounted to $17 and $3, respectively.

At September 30, 2017, we had domestic net operating loss carryforwards of approximately $12,809 for federal and $17,566 for state, which expire from September 30, 2018 through 2031. Further, we have an alternative minimum tax credit carryforward of approximately $76 available to offset future federal income taxes. This credit has an unlimited carryforward period.

We may recognize the tax benefit from an uncertain tax position only if it more likely than not to be sustained upon regulatory examination based on the technical merits of the position. The amount of the benefit for which an exposure exists is measured as the largest amount of benefit determined on a cumulative probability basis that we believe is more likely than not to be realized upon ultimate settlement of the position. At September 30, 2017 and 2016, a $16 liability remained for other uncertain income tax positions.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	2017	2016
Balance at beginning of year	$ 16	$ 16
Additions based on tax positions related to the current year	-	-
Additions for tax positions or prior years	-	-
Reductions for tax positions of prior years	-	-
Settlements	-	-
Balance at end of year	$ 16	$ 16

As noted in the table above, there has been no change in our gross uncertain tax positions during fiscal 2017 based on a state tax position.

We are no longer subject to U.S. federal tax examinations for years before 2013 or state and local for years before 2012, with limited exceptions. For federal purposes, the tax attributes carried forward could be adjusted through the

examination process and are subject to examination 3 years from the date of utilization.

We have assessed the application of Internal Revenue Code Section 382 regarding certain limitations on the future usage of net operating losses. No limitation applies as of September 30, 2017, and we will continue to monitor activities in the future.

Changes in Tax Laws Affecting Future Periods

Changes in tax laws and rates may affect recorded deferred tax assets and liabilities and our effective tax rate in the future. In December 2017, new federal tax law has (or is expected to be) issued. We are currently evaluating the effects of the new tax laws. However, we don't believe the changes will have a material effect on the consolidated financial statements.

9. STOCK-BASED COMPENSATION

Summary of Stock Option Plans and Activity

In March 2008, our shareholders approved the 2008 Stock Option Plan (the "Plan") to replace the 1997 Outside Director Stock Option Plan and the 1997 Employee Stock Option Plan. Future common shares will be granted from the 2008 Stock Option Plan. The purpose of the Plan is to promote our long-term interests by providing a means of attracting and retaining officers, directors and key employees. The Compensation Committee administers the Plan and approves the particular officers, directors or employees eligible for grants. Under the Plan, employees are granted the option to purchase our common shares at fair market value on the date of the grant. Generally, options granted vest and become exercisable in four equal installments commencing one year from date of grant and expire upon the earlier of the employee's termination of employment with us, or ten years from the date of grant. The Plan terminates in fiscal 2018. The maximum number of common shares that may be granted under the Plan is 500 shares. At September 30, 2017, 278 shares remained available for grants under the Plan.

The Compensation Committee has also issued non-qualified stock option grants with vesting periods different from the Plan. As of September 30, 2017 and 2016, respectively, total non-qualified stock options outstanding were 15.

No options were granted in fiscal 2017. The weighted-average assumptions used to compute the fair value of options granted for the fiscal year ended September 30, 2016 were as follows:

	2016
Risk-free interest rate	1.58 %
Dividend yield	0.00 %
Volatility of the expected market price of the Company's common shares	97.50%-97.50%
Expected life of the options (years)	8.0

A summary of our stock option activity for all options and related information for the years ended September 30, 2017 and 2016, respectively, is as follows (in thousands except for share prices):

	Options (shares)	Weighted-Average Exercise Price	Weighted-Average Grant Date Fair Value	Weighted-Average Remaining Contractual Life	Aggregate Intrinsic Value
Outstanding - October 1, 2015	319	$ 1.73			
Exercised	(3)	$ 1.14	$ 0.95		
Granted	10	$ 0.94	$ 0.79		
Terminated	(64)	$ 1.49			
Outstanding - September 30, 2016	262	$ 1.76	$ 1.39		
Outstanding - October 1, 2016	262	$ 1.76			
Exercised	(72)	$ 1.23	$ 1.02		
Granted	—	$ —	$ —		
Terminated	(50)	$ 2.11			
Outstanding - September 30, 2017	140	$ 1.91	$ 1.45	5.6	$ 45
Exercisable at September 30, 2017	111	$ 1.98	$ 1.47	5.0	$ 39

The aggregate intrinsic value is the product of the total options outstanding and the net positive difference of our common share price on September 30, 2017 and the options' exercise price.

As of September 30, 2017, our total unrecognized compensation cost related to non-vested stock options was $34 and is expected to be recognized over a weighted-average service period of 1.1 years. As of September 30, 2017, there are 15 shares underlying outstanding options that were granted outside of the Plan. Stock-based compensation expense for employee stock options for the years ended September 30, 2017 and 2016 was $19 and $45, respectively.

The following table summarizes outstanding and exercisable options as of September 30, 2017 (in thousands except per share amounts):

Range of Exercise Prices	Options Outstanding	Weighted average Remaining Contractual Life (Yrs)	Weighted average Exercise Price	Options Exercisable	Weighted average Exercise Price
$0.79 - $1.50	74	5.28	$ 1.17	67	$ 1.19
$1.51 - $4.00	50	7.60	$ 1.96	28	$ 2.03
$4.01 - $8.79	16	0.93	$ 5.09	16	$ 5.09

10. RETIREMENT PLAN

We have a 401(k) Retirement Plan (the “Plan”) covering all employees over twenty-one years of age with at least one year of service. Under the terms of the Plan, we match 50% of the first 6% of the employee contribution. The Plan also includes provisions for various contributions which may be instituted at the discretion of the Board of Directors. The contribution made by the participant may not exceed 30% of the participant’s annual wages. Contribution expense was $200 and $169 in fiscal 2017 and 2016, respectively.

11. SEGMENT INFORMATION

We operate in two principal segments – contract research services and research products. Our Services segment provides research and development support on a contract basis directly to pharmaceutical companies. Our Products segment provides liquid chromatography, electrochemical and physiological monitoring products to pharmaceutical companies, universities, government research centers, and medical research institutions. We evaluate performance and allocate resources based on these segments. Certain of our assets are not directly attributable to the Services or Products segments. These assets are grouped into the Corporate segment and include cash and cash equivalents, deferred income taxes, refundable income taxes, debt issue costs and certain other assets. We do not allocate such items to the principal segments because they are not used to evaluate their financial position. The accounting policies of these segments are the same as those described in the summary of significant accounting policies.

(a)	*Operating Segments*	
	Years Ended September 30,	
	2017	2016
Revenue:		
Services	$ 20,182	$ 15,924
Products	4,060	4,517
	$ 24,242	$ 20,441
Operating income (loss):		
Services	$ 1,755	$ (1,576)

Products	(477)	(1,464)
	$ 1,278	$ (3,040)
Interest Expense	(375)	(399)
Decrease in fair value of warrant liability	—	189
Other income	5	6
Income (loss) before income taxes	$ 908	$ (3,244)

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	Years Ended September 30,			Years Ended September 30,	
	2017	2016		2017	2016
Identifiable assets:			Depreciation and amortization:		
Services	$ 12,512	$ 12,413	Services	$ 1,318	$ 1,242
Products	4,807	5,562	Products	362	314
Corporate	3,098	3,164		$ 1,680	$ 1,556
	$ 20,417	$ 21,139			
Goodwill, net:			Capital expenditures:		
Services	$ 38	$ 38	Services	$ 307	$ 945
Products	—	—	Products	40	311
	$ 38	$ 38		$ 347	$ 1,256

(b) *Geographic Information*

	Years Ended September 30,	
	2017	2016
Sales to External Customers:		
United States	$21,645	$18,385
Other North America	266	297
Pacific Rim	1,395	1,148
Europe	774	447
Other	162	164
	$24,242	$20,441
Long-lived Assets:		
United States	$15,024	$16,201
	$15,024	$16,201

(c) *Major Customers*

In fiscal 2017, our Services group continued its presence at several important existing customers. In fiscal 2017, one customer accounted for approximately 13.1% of total sales and 5.2% of total trade accounts receivable at September 30, 2017. In fiscal 2016, this customer accounted for approximately 14.0% of total sales and 13.2% of total trade accounts receivable at September 30, 2016. The customer discussed is included in our Services segment. There can be no assurance that our business will move away from dependence upon a limited number of customer relationships.

12. ACCRUED EXPENSES

As part of a fiscal 2012 restructuring, we accrued for lease payments at the cease use date for our United Kingdom facility and have considered free rent, sublease rentals and the number of days it would take to restore the space to its original condition prior to our improvements. Based on these matters, we have a $1,000 reserve for lease related costs. Additionally, we accrued $117 for legal and professional fees and other costs to remove improvements previously made to the facility. At September 30, 2017 and September 30, 2016, respectively, we had $1,117 reserved for the liability. The reserve is classified as a current liability on the Consolidated Balance Sheets.

13. SELF-INSURANCE

In fiscal 2016 and the first quarter of fiscal 2017, the Company was self-insured for certain costs related to its employee health plan. Costs resulting from noninsured losses were charged to income when incurred. The Company purchased insurance which limited its exposure for individual claims to approximately $75 and had an aggregating specific deductible of $85 at September 30, 2016. The Company's expense related to the plan was $1,531 for the year ended September 30, 2016. In order to better control health costs in fiscal 2017, the Company moved to a fully-insured health plan, minimizing the claim spikes we experienced in fiscal 2016. The Company's total expense was $925 for fiscal 2017.

14. RELATED-PARTY TRANSACTIONS

The Company entered into a consulting agreement with a shareholder during fiscal 2016. The Company incurred consulting fees and reimbursed travel costs of $31 for the year ended September 30, 2016. The agreement was terminated on good terms on June 1, 2016. In April 2017, the Company renewed the agreement with the shareholder, incurring $22 in fees and reimbursed travel costs in fiscal 2017.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders

Bioanalytical Systems, Inc.

We have audited the accompanying consolidated balance sheets of Bioanalytical Systems, Inc. as of September 30, 2017 and 2016, and the related consolidated statements of operations and comprehensive income (loss), stockholders' equity, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Bioanalytical Systems, Inc. as of September 30, 2017 and 2016, and the results of its operations and its cash flows for the years then ended, in conformity with U.S. generally accepted accounting principles.

/s/ RSM US LLP

Indianapolis, Indiana
December 22, 2017

ITEM 9–CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A–CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to provide reasonable assurance that information, which is required to be disclosed timely, is accumulated and communicated to management in a timely fashion. In designing and evaluating such controls and procedures, we recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives. Our management is necessarily required to use judgment in evaluating controls and procedures.

Management performs periodic evaluations to determine if our disclosure controls and procedures are effective to provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the Securities Exchange Act of 1934, as amended, is accumulated and communicated to management, including our acting principal executive officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure and are effective to provide reasonable assurance that such information is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms. An evaluation of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report was performed under the supervision and with the participation of management, which resulted in a determination by our acting principal executive officer and Chief Financial Officer that our disclosure controls and procedures were effective as of September 30, 2017.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Under the supervision and with the participation of our management, including our acting principal executive officer and Chief Financial Officer (or persons performing similar functions), we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Based on our assessment and those criteria, management concluded that the Company maintained effective internal control over financial reporting as of September 30, 2017.

Changes in Internal Controls

There were 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 fourth quarter of fiscal 2017 that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to rules of the Securities and Exchange Commission that permit the Company to provide only Management's report in this report.

ITEM 9B–OTHER INFORMATION

Not applicable.

PART III

ITEM 10–DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The following information concerns the persons who served as the directors of the Company as of the date of this filing. Except as indicated in the following paragraphs, the principal occupations of these persons have not changed in the past five years. Information concerning the executive officers of the Company may be found in "Executive Officers of the Registrant" under Item 1 of this report, which is incorporated herein by reference.

Name	Age	Position
Gregory C. Davis, Ph.D.	64	Chairman
Richard A. Johnson	72	Director
R. Matthew Neff	62	Director
Wendy Perrow	59	Director

Gregory C. Davis, Ph.D. was elected to the board on June 14, 2017. Dr. Davis currently runs his own consulting firm, which he founded in 2012, assisting companies with regulatory and control strategy and product development issues. In 2014, Dr. Davis joined Calibrium, LLC as Vice President of CMC, Regulatory, and Quality. Calibrium was developing novel biotherapeutics for the treatment of diabetes. The company was sold to Novo Nordisk in late 2015. From 1992 to 2012, Dr. Davis held various leadership positions at Eli Lilly in Biotechnology Product Development, Global Regulatory Affairs, Global Brand Teams, and Quality. Dr. Davis' tenure at Eli Lilly included service as Chief Operating Officer of the Xigris Product Team. Xigris was the first biotechnology product ever approved for the treatment of severe sepsis. When Dr. Davis retired from Eli Lilly in December of 2012, he was Executive Director and Senior Principle Fellow in Global Regulatory Affairs. Dr. Davis has held numerous leadership positions within the Pharmaceutical Research and Manufacturers Association (PhRMA), the United States Pharmacopeia (USP), and the Biotechnology Industry Organization (BIO). He also served for five years as the PhRMA liaison to the International Conference on Harmonization (ICH) for Q5/Q6 Biotechnology topics. He coauthored several of the ICH guidances on registration standards for biotechnology products, which are still in use today. Dr. Davis received his bachelor's degree from Southeast Missouri State University and his Ph.D. in Analytical Chemistry from Purdue University studying under Dr. Peter Kissinger, founder of BASi. As Chairman of the Board, Dr. Davis provides the Board of Directors with significant industry and leadership experience.

Richard A. Johnson, Ph.D. was elected as a director of the Company on May 9, 2012. Dr. Johnson is currently an executive scientific consultant. From 1990 to 2008, he served as Founder and President of AvTech Laboratories. Prior to founding AvTech Laboratories, he served in various positions with The Upjohn Company, including Senior Research Scientist, Manager of Product Control, Manager of Quality Assurance Product Support and Director of Strategic Planning. Dr. Johnson received his Bachelor of Science in Chemistry from the Illinois Institute of Technology and his Ph.D. in Chemical Physics from Michigan State University. Dr. Johnson brings to the Board of

Directors knowledge and insight on scientific matters, stemming from his extensive experience in the pharmaceutical industry.

R. Matthew Neff was elected to the board on August 1, 2017. Mr. Neff is currently Of Counsel with Bingham Greenebaum Doll LLP's Corporate and Transactional Department. From August 2013 through June 2016, Mr. Neff served as Chairman, President and Chief Executive Officer of AIT Laboratories, a national toxicology lab headquartered in Indianapolis, Indiana. Mr. Neff joined AIT Laboratories after his tenure as President and Chief Executive Officer of CHV Capital, Inc., the venture capital subsidiary of Indiana University Health, a role he had held since 2007. Mr. Neff started his career as a practicing lawyer and Partner at Baker & Daniels. He then served as the Deputy to the Chairman of the Federal Housing Finance Board (now known as the Federal Housing Finance Agency) in the first Bush Administration. Thereafter, he became the co-founder and Chief Executive Officer of two Indianapolis companies: Circle Investors, an insurance holding company then chaired by former Vice President of the United States, Dan Quayle, and Senex Financial Corp., a healthcare receivables finance company. Mr. Neff currently serves on the Board of Directors of Fairbanks Addiction Treatment Center and was a member of Riley Children's Foundation's Board of Directors from January 2000 to November 2012. Mr. Neff earned his bachelor's degree and graduated a Phi Beta Kappa from DePauw University. He also received his Juris Doctor degree from Indiana University. Mr. Neff's legal expertise, financial acumen, knowledge of our industry and leadership background, including AIT Laboratories, ideally situate him for service as a director.

Wendy Perrow, MBA was elected as a director of the Company on December 10, 2015. Ms. Perrow is Chief Executive Officer at AsclepiX Therapeutics. Ms. Perrow joined AsclepiX Therapeutics in 2016 as Chief Executive Officer. Prior to joining AsclepiX Therapeutics, Ms. Perrow was Chief Executive Officer at Alba Therapeutics and held senior executive marketing positions with private and public pharmaceutical companies. From 2004 to 2007, she was Vice President of Marketing and Sales for Sigma-Tau Pharmaceuticals, Inc. From 1989 to 2003, Ms. Perrow held positions at Merck and Co., Inc. in marketing, marketing promotion, international business research analysis, training, and sales. Ms. Perrow began her career in a division of Johnson & Johnson. Ms. Perrow holds a bachelor's degree from Eastern Illinois University and a Masters of Business Administration degree in finance and marketing from Duke University - The Fuqua School of Business. Ms. Perrow's active involvement in the therapeutics industry, her educational background and her leadership experience, facilitate her significant contributions as a director.

The Board of Directors has established an Audit Committee. The Audit Committee is responsible for, among other items, engaging and overseeing the independent auditors, reviewing, in connection with the independent auditors, (i) the audit plan, (ii) the adequacy of internal controls, (iii) the audit report and (iv) management's letter, and undertaking such other incidental functions as the board may authorize. R. Matthew Neff, Gregory C. Davis, Wendy Perrow and Richard A. Johnson are the members of the Audit Committee. The Board of Directors has determined that Mr. Neff is an audit committee financial expert (as defined by Item 401(h) of Regulation S-K). All of the members of the Audit Committee are "independent" (as defined by Item 7(d)(3)(iv) of Schedule 14A).

The Board of Directors has adopted a Code of Ethics (as defined by Item 406 of Regulation S-K) that applies to the Company's Officers, Directors and employees, a copy of which is incorporated herein by reference to Exhibit 14 to Form 10-K for the fiscal year ended September 30, 2006.

SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE

Section 16(a) of the Securities Exchange Act of 1934 requires the Company's directors and executive officers and persons who beneficially own more than ten percent of BASi's Common Shares to file with the Securities and Exchange Commission reports showing ownership of and changes in ownership of BASi's Common Shares. On the basis of information available to us, we believe that all Section 16 filing requirements were met for fiscal 2017.

ITEM 11–EXECUTIVE COMPENSATION

The information included under the captions "Elections of Directors – Non-employee Director Compensation and Benefits" and "Compensation of Executive Officers" in the Proxy Statement for the 2018 Annual Meeting is incorporated herein by reference in response to this item.

ITEM 12–SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information contained under the “Principal Shareholders Table” in the Proxy Statement for the 2018 Annual Meeting and Item 5 of this report is incorporated by reference in response to this item.

For additional information regarding our stock option plans, please see Note 9 in the Notes to the Consolidated Financial Statements in this report.

ITEM 13–CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information included under the captions “Certain Relationships and Related Transactions” and “Election of Directors – Board Independence” in the Proxy Statement for the 2018 Annual Meeting is incorporated herein by reference in response to this item.

ITEM 14–PRINCIPAL ACCOUNTING FEES AND SERVICES

The information included under the caption “Selection of Independent Registered Accounting Firm” in the Proxy Statement for the 2018 Annual Meeting is incorporated herein by reference in response to this item.

PART IV

ITEM 15–EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Documents filed as part of this Report.

1. Financial Statements: See Index to Consolidated Financial Statements under Item 8 on Page 30 of this report.
2. Financial Statement Schedules: Schedules are not required, are not applicable or the information is shown in the Notes to the Consolidated Financial Statements.
3. Exhibits: See Index to Exhibits, which is incorporated herein by reference.

SIGNATURES

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

BIOANALYTICAL
SYSTEMS, INC.
(Registrant)

Date: December 22, 2017 By:/s/ Philip A. Downing
Philip A. Downing
Senior Vice President,
Preclinical Services
(Acting Principal Executive
Officer)

Date: December 22, 2017 By:/s/ Jill C. Blumhoff
Jill C. Blumhoff
Chief Financial Officer and
Vice President of Finance
(Principal Financial Officer
and Principal Accounting
Officer)

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

Signature	**Capacity**	**Date**
/s/ Gregory C. Davis, Ph.D. Gregory C. Davis, Ph.D.	Chairman	December 22, 2017
/s/ R. Matthew Neff R. Matthew Neff	Director	December 22, 2017
/s/ Richard A. Johnson, Ph.D. Richard A. Johnson, Ph.D.	Director	December 22, 2017
/s/ Wendy Perrow, MBA Wendy Perrow, MBA	Director	December 22, 2017

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EXHIBIT INDEX

Number		Description of Exhibits
(3)	3.1	Second Amended and Restated Articles of Incorporation of Bioanalytical Systems, Inc. as amended through May 9, 2011 (incorporated by reference to Exhibit 3.1 to Form-10Q for the quarter ended June 30, 2011).
	3.2	Second Amended and Restated Bylaws of Bioanalytical Systems, Inc., as subsequently amended (incorporated by reference to Exhibit 3.2 to Form 10-K for the year ended September 30, 2015).
(4)	4.1	Specimen Certificate for Common Shares (incorporated by reference to Exhibit 4.1 to Registration Statement on form S-1, Registration No. 333-36429).
	4.2	Certificate of Designation of Preferences, Rights, and Limitations of Convertible Preferred Shares (incorporated by reference to Exhibit 3.1 on Form 8-K, dated May 12, 2011).
	4.3	Specimen Certificate for 6% Series A Convertible Preferred Shares (incorporated by reference to Exhibit 4.3 to Registration Statement on Form S-1, Registration No. 333-172508).
(10)	10.1	Agreement for Lease, by and among Bioanalytical Systems, Inc., Bioanalytical Systems Limited and Pettifer Estates Limited, dated October 11, 2007 (incorporated by reference to Exhibit 10.1 to Form 8-K filed October 17, 2007).
	10.2	Form of Lease, by and among Bioanalytical Systems, Inc., Bioanalytical Systems Limited and Pettifer Estates Limited (incorporated by reference to Exhibit 10.2 to Form 8-K filed October 17, 2007).
	10.3	Bioanalytical Systems, Inc. 2008 Director and Employee Stock Option Plan (*) (incorporated by reference to Appendix A to the Revised Definitive Proxy Statement filed February 5, 2008, SEC File No. 000-23357).
	10.4	Form of Employee Stock Option Agreement under Bioanalytical Systems, Inc. 2008 Director and Employee Stock Option Plan (*) (filed herewith).
	10.5	Form of Director Stock Option Agreement under Bioanalytical Systems, Inc. 2008 Director and Employee Stock Option Plan (*) (filed herewith).
	10.6	Form of Securities Purchase Agreement between Bioanalytical Systems, Inc. and certain purchasers, dated May 5, 2011 (incorporated by reference to Exhibit 10.27 to Registration Statement on Form S-1, Registration No. 333-172508).
	10.7	Credit Agreement between Bioanalytical Systems, Inc. and The Huntington National Bank, dated May 14, 2014 (incorporated by reference to Exhibit 10.1 to Form 10-Q filed August 14, 2014).
	10.8	

	Offer letter by and between Bioanalytical Systems, Inc. and Dr. James S. Bourdage, effective June 2, 2014 (incorporated by reference to Exhibit 10.22 to Form 10-K for the fiscal year ended September 30, 2014).*
10.9	Lease Agreement between Bioanalytical Systems, Inc. and Cook Biotech, effective January 28, 2015 (incorporated by reference to Exhibit 10.1 to the Form 10-Q filed May 15, 2015).
10.10	First Amendment to Credit Agreement between Bioanalytical Systems, Inc. and The Huntington Bank, executed May 14, 2015 (incorporated by reference to Exhibit 10.1 to the Form 10-Q filed August 14, 2015).

	10.11	Forbearance Agreement and Second Amendment to Credit Agreement between Bioanalytical Systems, Inc. and The Huntington Bank, executed April 27, 2016 (incorporated by reference to Exhibit 10.1 to Form 8-K, dated May 4, 2016).
	10.12	Second Forbearance Agreement and Third Amendment to Credit Agreement between Bioanalytical Systems, Inc. and The Huntington Bank, effective June 30, 2016 (incorporated by reference to Exhibit 10.2 to Form 10-Q filed August 15, 2016).
	10.13	Employment Agreement, by and between Bioanalytical Systems, Inc. and Jill C. Blumhoff effective May 13, 2016 (incorporated by reference to Exhibit 10.1 to Form 8-K , dated May 13, 2016).*
	10.14	Employee Incentive Stock Option Agreement between Jill C. Blumhoff and Bioanalytical Systems, Inc., dated May 13, 2016 (incorporate by reference to Exhibit 10.4 to Form 10-Q filed August 15, 2016).*
	10.15	Third Forbearance Agreement and Fourth Amendment to Credit Agreement between Bioanalytical Systems, Inc. and The Huntington Bank, effective September 30, 2016 (incorporated by reference to Exhibit 10.1 to Form 8-K filed October 3, 2016).
	10.16	Fourth Forbearance Agreement and Fifth Amendment to Credit Agreement between Bioanalytical Systems, Inc. and The Huntington Bank, effective October 31, 2016 (incorporated by reference to Exhibit 10.1 to Form 8-K filed November 4, 2016).
	10.17	Settlement Agreement and Release of All Claims, by and between Bioanalytical Systems, Inc. and Jacqueline M. Lemke (incorporated by reference to Exhibit 10.1 to Form 8-K filed January 17, 2017).
	10.18	Fifth Forbearance Agreement and Sixth Amendment to Credit Agreement between Bioanalytical Systems, Inc. and The Huntington Bank, effective January 31, 2017 (incorporated by reference to Exhibit 10.1 to Form 8-K filed February 1, 2017).
	10.19	Credit Agreement between Bioanalytical Systems, Inc. and First Internet Bank, effective June 23, 2017 (incorporated by reference to Exhibit 10.1 to Form 10-Q filed August 14, 2017).
(14)	14.1	Code of Ethics (incorporated by reference to Exhibit 14 to Form 10-K for the fiscal year ended September 30, 2006).
(21)	21.1	Subsidiaries of the Registrant (filed herewith).
(23)	23.1	Consent of Independent Registered Public Accounting Firm RSM US LLP (filed herewith).
(31)	31.1	Certification of Acting Principal Executive Officer (filed herewith).
	31.2	Certification of Chief Financial Officer (filed herewith).
(32)	32.1	Written Statement of Acting Principal Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350) (filed herewith).

32.2	Written Statement of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350) (filed herewith).
101	XBRL data file (filed herewith).

* Management contract or compensatory plan or arrangement.