FLOTEK INDUSTRIES INC/CN/
Form 10-K
March 08, 2018
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-K
ý ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 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 1-13270

FLOTEK INDUSTRIES, INC.
(Exact name of registrant as specified in its charter)

Delaware	90-0023731
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
10603 W. Sam Houston Parkway N. #300 Houston, TX	77064
(Address of principal executive offices)	(Zip Code)

(713) 849-9911
(Registrant’s telephone number, including area code)

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

Title of each	Name of each exchange

class	on which registered
Common Stock, $0.0001 par value	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:
None
Indicate by check mark:
- if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No ý
- if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes ¨ No ý
- 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 ý No ¨
- whether the registrant has submitted electronically and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ý No ¨
- if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ¨
- 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 the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

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

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

- whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ¨ No ý

The aggregate market value of voting stock held by non-affiliates of the registrant as of June 30, 2017 (based on the closing market price on the NYSE Composite Tape on June 30, 2017) was approximately $437,821,000. At January 31, 2018, there were 56,756,480 outstanding shares of the registrant's common stock, $0.0001 par value.

DOCUMENTS INCORPORATED BY REFERENCE

The information required in Part III of the Annual Report on Form 10-K is incorporated by reference to the registrant's definitive proxy statement to be filed pursuant to Regulation 14A for the registrant's 2018 Annual Meeting of Stockholders.

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FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (the “Annual Report”), and in particular, Part II, Item 7 – “Management’s Discussion and Analysis of Financial Condition and Results of Operations,” contains “forward-looking statements” within the meaning of the safe harbor provisions, 15 U.S.C. § 78u-5, of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are not historical facts but instead represent the Company’s current assumptions and beliefs regarding future events, many of which, by their nature, are inherently uncertain and outside the Company’s control. The forward-looking statements contained in this Annual Report are based on information available as of the date of this Annual Report. The forward looking statements relate to future industry trends and economic conditions, forecast performance or results of current and future initiatives and the outcome of contingencies and other uncertainties that may have a significant impact on the Company’s business, future operating results and liquidity. These forward-looking statements generally are identified by words such as “anticipate,” “believe,” “estimate,” “continue,”“intend,” “expect,” “plan,” “forecast,” “project”

and similar expressions, or future-tense or conditional constructions such as “will,” “may,” “should,” “could” and “would,” or t negative thereof or other variations thereon or comparable terminology. The Company cautions that these statements are merely predictions and are not to be considered guarantees of future performance. Forward-looking statements are based upon current expectations and assumptions that are subject to risks and uncertainties that can cause actual results to differ materially from those projected, anticipated or implied. A detailed discussion of potential risks and uncertainties that could cause actual results and events to differ materially from forward-looking statements include, but are not limited to, those discussed in Part I, Item 1A – “Risk Factors” of this Annual Report and periodically in future reports filed with the Securities and Exchange Commission (the “SEC”).
The Company has no obligation to publicly update or revise any forward-looking statements, whether as a result of new information or future events, except as required by law.

PART I

Item 1. Business.

General

Flotek Industries, Inc. (“Flotek” or the “Company”) is a global, diversified, technology-driven company that develops and supplies chemistry and services to the oil and gas industries, and high value compounds to companies that make food and beverages, cleaning products, cosmetics, and other products that are sold in consumer and industrial markets.

The Company was originally incorporated in the Province of British Columbia on May 17, 1985. In October 2001, the Company moved the corporate domicile to Delaware and effected a 120 to 1 reverse stock split by way of a reverse merger with CESI Chemical, Inc. (“CESI”). Since then, the Company has grown through a series of acquisitions and organic growth.

In December 2007, the Company’s common stock began trading on the New York Stock Exchange (“NYSE”) under the stock ticker symbol “FTK.” Annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, (the “Exchange Act”) are posted to the Company’s website, www.flotekind.com, as soon as practicable subsequent to electronically filing or furnishing to the SEC. Information contained in the Company’s website is not to be considered as part of any regulatory filing. As used herein, “Flotek,” the “Company,” “we,” “our,” and “us” refers to Flotek Industries, Inc. and/or the Company’s wholly owned subsidiaries. The use of these terms is not intended to connote any particular corporate status or relationship.

Recent Developments

During the fourth quarter of 2016, the Company initiated a strategic restructuring of its business to enable a greater focus on its core businesses in energy chemistry and consumer and industrial chemistry. During 2017, the Company completed the sale of substantially all of the assets and transfer of certain specified liabilities and obligations of each of the Drilling Technologies and Production Technologies segments. An investment banking advisory services firm was engaged and actively marketed these segments. The Company has classified the assets, liabilities, and results of operations for these two segments as “Discontinued Operations” for all periods presented.

In August 2016, the Company opened its new Global Research & Innovation Center. This state-of-the-art research facility fosters the development of next-generation innovative chemistries and permits expanded collaboration between clients, leaders from academia, and Company scientists. These collaborative opportunities are important and will distinguish the Company’s chemistry technologies and capability within the industry.

In July 2016, the Company acquired 100% of the stock and interests in International Polymerics, Inc. (“IPI”) and related entities for $7.9 million in cash consideration, net of cash acquired, and 247,764 shares of the Company’s common stock. IPI is a U.S. based manufacturer of high viscosity guar gum and guar slurry for the oil and gas industry with a wide selection of stimulation chemicals.

In January 2015, the Company acquired 100% of the assets of International Artificial Lift, LLC (“IAL”) for $1.3 million in cash consideration and 60,024 shares of the Company’s common stock. IAL specializes in the design, manufacturing and service of next-generation hydraulic pumping units that serve to increase and maximize production for oil and natural gas wells. The assets, liabilities, and results of operations of IAL are included in discontinued operations.

Description of Operations and Segments

The Company has two strategic business segments: Energy Chemistry Technologies and Consumer and Industrial Chemistry Technologies. The Drilling Technologies and Production Technologies segments were sold during 2017 and all historical information is classified as discontinued operations.

The Company offers competitive products and services derived from technological advances, some of which are patented, that are responsive to industry demands in both domestic and international markets. Flotek operates and/or distributes its products in over 20 domestic and international markets.

Financial information about operating segments and geographic concentration is provided in Note 18 – “Segment and Geographic Information” in Part II, Item 8 – “Financial Statements and Supplementary Data” of this Annual Report. Information about the Company’s two operating segments is below.

Energy Chemistry Technologies

The Energy Chemistry Technologies (“ECT”) segment designs, develops, manufactures, packages, distributes, and markets specialty chemistries for use in oil and gas (“O&G”) well drilling, cementing, completion, and stimulation activities designed to maximize recovery in both new and mature fields. These specialty chemistries possess enhanced performance characteristics and are manufactured to withstand a broad range of downhole pressures, temperatures and other well-specific conditions to be compliant with customer specifications. This segment has technical services laboratories and a research and innovation laboratory that focus on design improvements, development and viability testing of new chemistry formulations, and continued enhancement of existing products. Chemistries branded

Complex nano-Fluid® technologies ("CnF® products") are patented both domestically and internationally and are proven strategically cost-effective performance additives within both oil and natural gas markets. The CnF® product mixtures are environmentally friendly, stable mixtures of plant derived oils, water, and surface active agents which organize molecules into nano structures. The combined advantage of solvents, surface active agents and water, and the resultant nano structures, improve well treatment results as compared to the independent use of solvents and surface active agents. CnF® products are composed of renewable, plant derived, cleaning ingredients and oils that are certified as biodegradable. CnF® chemistries help achieve improved operational and financial results for the Company's customers in low permeability sand and shale reservoirs.

Consumer and Industrial Chemistry Technologies

The Consumer and Industrial Chemistry Technologies ("CICT") segment sources citrus oil domestically and internationally and is one of the largest processors of citrus oils in the world. Products produced from processed citrus oil include (1) high value compounds used as additives by companies in the flavors and fragrances markets and (2) environmentally friendly chemistries for use in the oil & gas industry and numerous other industries around the world. The CICT segment designs, develops, and manufactures products that are sold to companies in the flavor and fragrance industries and specialty chemical industry. These technologies are used within food and beverage, fragrance, and household and industrial cleaning products industries.

Discontinued Operations

Drilling Technologies. The Drilling Technologies segment, reported as discontinued operations, provided downhole drilling tools for use in energy and mining activities. This segment assembled, rented, sold, inspected, and marketed specialized equipment used in energy, mining, and industrial drilling activities. Established tool rental operations were located throughout the United States (the "U.S.") and in a number of international markets.

Production Technologies. The Production Technologies segment, reported as discontinued operations, provided pumping system components, electric submersible pumps ("ESPs"), gas separators, production valves, and complementary services. Through the Company's acquisition of IAL, the Company provided a line of next generation hydraulic pumping units that served to increase and maximize production for oil and natural gas wells.

Seasonality

Overall, operations are not significantly affected by seasonality; however, winter weather conditions can pose delays in clients' activity levels, primarily in oil and gas. Certain working capital components build and recede throughout the year in conjunction with established purchasing and selling cycles that can impact operations and financial position. In particular, citrus oil inventories increase during the first and second quarters in-line with the citrus crop harvest and processing season. The performance of certain services within each of the Company's segments can be susceptible to both weather and naturally occurring phenomena, including, but not limited to, the following:

- the severity and duration of winter temperatures in North America, which impacts natural gas storage levels, drilling activity, and commodity prices;
- the timing and duration of the Canadian spring thaw and resulting restrictions that impact activity levels;
- the timing and impact of hurricanes upon coastal and offshore operations; and
- adverse weather and disease can affect citrus crops in Florida and Brazil which can negatively impact the availability of citrus oils for the CICT business unit.

Product Demand and Marketing

Demand for the Company's energy chemistry products and services is dependent on levels of conventional and non-conventional oil and natural gas well drilling and completion activity, both domestically and internationally. Products in both the Energy Chemistry Technologies and Consumer and Industrial Chemistry Technologies segments are marketed directly to customers through the Company's direct sales force and through certain contractual agency arrangements. Established customer relationships provide repeat sales opportunities within all segments. While the Company's primary marketing efforts remain focused in North America, a growing amount of resources and effort are focused on emerging international markets, especially in the Middle East and North Africa ("MENA"), Asia-Pacific, and South America. In addition to direct marketing and relationship development, the Company also markets products and services through the use of third party agents primarily in international markets.

Customers

The Company’s customers primarily include major integrated oil and natural gas companies, oilfield service companies, independent oil and natural gas companies, pressure pumping service companies, international supply chain management companies, national and state-owned oil companies, household and commercial cleaning product companies, fragrance and cosmetic companies, and food and beverage manufacturing companies. In the two segments reported in continuing operations, the Company had one major customer for the year ended December 31, 2017, which accounted for 13% of consolidated revenue, two major customers for the year ended December 31, 2016, which accounted for 16% and 13% of consolidated revenue, and three major customers for the year ended December 31, 2015, which accounted for 17%, 15%, and 11% of consolidated revenue. In aggregate, the Company’s largest three customers collectively accounted for 27%, 36%, and 43% of consolidated revenue for the years ended December 31, 2017, 2016, and 2015, respectively.

Research and Innovation

The Company is engaged in research and innovation activities focused on the design of reservoir specific, customized chemistries in the Energy Chemistry Technologies segment and improvement of flavor and fragrance additives in the Consumer and Industrial Chemistry Technologies segment. In these two segments, for the years ended December 31, 2017, 2016, and 2015, the Company incurred $13.6 million, $9.3 million, and $6.7 million, respectively, of research and innovation expense. In 2017, research and innovation expense was approximately 4.3% of consolidated revenue. The Company expects that its 2018 research and innovation investment will continue to remain a material portion of overall spending to support new product development and customization initiatives for its clients.

Backlog

Due to the nature of the Company’s contractual customer relationships and the way they operate, the Company has historically not had significant backlog order activity.

Intellectual Property

The Company’s policy is to protect its intellectual property, both within and outside of the U.S. The Company considers patent protection for all products and methods deemed to have commercial significance and that may qualify for patent protection. The decision to pursue patent protection is dependent upon several factors, including whether patent protection can be obtained, cost-effectiveness, and alignment with operational and commercial interests. The Company believes its patent and trademark portfolio, combined with confidentiality agreements, trade secrets, proprietary designs, and manufacturing and operational expertise, are necessary and appropriate to protect its intellectual property and ensure continued strategic advantage. The Company currently has 28 issued patents and over seven dozen pending patent applications filed in the U.S. and abroad on various chemical compositions and methods and software methods. In addition, the Company currently has 70 registered trademarks and over two dozen pending trademark applications filed in the U.S. and abroad, covering a variety of its goods and services.

Competition

The ability to compete in the oilfield services industry and the consumer and industrial markets is dependent upon the Company’s ability to differentiate its products and services, provide superior quality and service, and maintain a competitive cost structure with sufficient raw material supplies. Activity levels in the oil field goods and services industry are impacted by current and expected oil and natural gas prices, oil and natural gas drilling activity, production levels, and customer drilling and completion designated capital spending. Domestic and international regions in which Flotek operates are highly competitive. The unpredictability of the energy industry and commodity price fluctuations

creates both increased risk and opportunity for the products and services of both the Company and its competitors. Certain oil and natural gas service companies competing with the Company are larger and have access to more resources. Such competitors could be better situated to withstand industry downturns, compete on the basis of price, and acquire and develop new equipment and technologies, all of which could affect the Company’s revenue and profitability. Oil and natural gas service companies also compete for customers and strategic business opportunities. Thus, competition could have a detrimental impact upon the Company’s business.

The citrus-based terpene (d-limonene) is a major feedstock for many of the Company’s CnF® chemistries. In addition, the Company utilizes naturally derived terpenes from other sources and bio-based solvents from other natural sources when it determines the efficacy of such formulas is appropriate. The Company has the ability to purify these alternative solvents to ensure they meet Flotek’s rigorous environmental standards.

The Company’s Consumer and Industrial Chemistry Technologies segment faces competition from other citrus processors, flavor companies, and other solvent sources. Other terpenes and esters can provide an effective substitute to the Company’s citrus-based terpenes, although, without refinement and enhanced formulations efforts, are generally of lower quality. Such terpenes and esters can be cheaper than citrus terpenes, but, as noted above, can contain unfavorable characteristics and compounds that have varying degrees of toxicity and performance limitations. The Company’s chemistries are intended to replace these undesirable qualities. In addition, the segment’s flavor ingredients compete with synthetic and bio-engineered substitutes that are cheaper than natural flavors derived from citrus oils. These substitutes lack complexity and impact of the Company’s natural flavors and fragrances.

Raw Materials

Materials and components used in the Company's servicing and manufacturing operations, as well as those purchased for sale, are generally available on the open market from multiple sources. Collection and transportation of raw materials to Company facilities, however, could be adversely affected by extreme weather conditions. Additionally, certain raw materials used by the chemistries segments are available from limited sources. Disruptions to suppliers could materially impact sales. The prices paid for raw materials vary based on energy, citrus, guar, and other commodity price fluctuations, tariffs, duties on imported materials, foreign currency exchange rates, business cycle position, and global demand. Higher prices for chemistries, citrus, guar, and other raw materials could adversely impact future sales and contract fulfillments.

The Company is diligent in its efforts to identify alternate suppliers, in its contingency planning for potential supply shortages and in its proactive efforts to reduce costs through competitive bidding practices. When able, the Company uses multiple suppliers, both domestically and internationally, to purchase raw materials on the open market.

Citrus greening disease has adversely affected the availability of citrus crops around the world, thereby negatively impacting the supply and increasing the price of citrus terpenes. The Company's market position, inventory, and forward purchases helps ensure availability for its patented CnF® technologies, as well as its existing customer base within CICT. As mentioned previously, the Company has also developed new CnF® formulations utilizing alternative solvents. These new formulations not only diversify the Company's dependence on citrus terpenes, but they also provide certain performance benefits necessary for specific customer and reservoir challenges.

Government Regulations

The Company is subject to federal, state, and local environmental, occupational safety, and health laws and regulations within the U.S. and other countries in which the Company does business. These laws and regulations strictly govern the manufacture, storage, transportation, sale, use, and disposal of chemistry products. The Company strives to ensure full compliance with all regulatory requirements and is unaware of any material instances of noncompliance.

The Company continually evaluates the environmental impact of its operations and attempts to identify potential liabilities and costs of any environmental remediation, litigation, or associated claims. Several products of the Energy Chemistry Technologies and Consumer and Industrial Chemistry Technologies segments are considered hazardous materials. In the event of a leak or spill in association with Company operations, the Company could be exposed to risk of material cost, net of insurance proceeds, to remediate any contamination. No environmental claims are currently being litigated, and the Company does not expect that costs related to remediation requirements will have a significant adverse effect on the Company's consolidated financial position or results of operations.

Employees

At December 31, 2017, the Company had 334 employees, exclusive of existing worldwide agency relationships. None

of the Company's employees are covered by a collective bargaining agreement and labor relations are generally positive. Certain international locations have staffing or work arrangements that are contingent upon local work councils or other regulatory approvals.

Available Information and Website

The Company's website is accessible at www.flotekind.com. Annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act are available (see the "Investor Relations" section of the Company's website), as soon as reasonably practicable, subsequent to electronically filing or otherwise providing reports to the SEC. Corporate governance materials, guidelines, by-laws, and code of business conduct and ethics are also available on the website. A copy of corporate governance materials is available upon written request to the Company.

All material filed with the SEC's "Public Reference Room" at 100 F Street NE, Washington, DC 20549 is available to be read or copied. Information regarding the "Public Reference Room" can be obtained by contacting the SEC at 1-800-SEC-0330. Further, the SEC maintains the www.sec.gov website, which contains reports and other registrant information filed electronically with the SEC.

The 2017 Annual Chief Executive Officer Certification required by the NYSE was submitted on May 1, 2017. The certification was not qualified in any respect. Additionally, the Company has filed all principal executive officer and financial officer certifications as required under Sections 302 and 906 of the Sarbanes-Oxley Act of 2002 with this Annual Report. Information with respect to the Company's executive officers and directors is incorporated herein by reference to information to be included in the proxy statement for the Company's 2018 Annual Meeting of Stockholders.

The Company has disclosed and will continue to disclose any changes or amendments to the Company's code of business conduct and ethics as well as waivers to the code of ethics applicable to executive management by posting such changes or waivers on the Company's website.

Item 1A. Risk Factors.

The Company’s business, financial condition, results of operations, and cash flows are subject to various risks and uncertainties. Readers of this report should not consider any descriptions of these risk factors to be a complete set of all potential risks that could affect Flotek. These factors should be carefully considered together with the other information contained in this Report and the other reports and materials filed by the Company with the SEC. Further, many of these risks are interrelated and, as a result, the occurrence of certain

risks could trigger and/or exacerbate other risks. Such a combination could materially increase the severity of the impact of these risks on our business, results of operations, financial condition, or liquidity.

This Annual Report contains “forward-looking statements,” as defined in the Private Securities Litigation Reform Act of 1995, that involve risks and uncertainties. Forward-looking statements discuss Company prospects, expected revenue, expenses and profits, strategic and operational initiatives, and other activities. Forward-looking statements also contain suppositions regarding future oil and natural gas industry conditions, as well as market conditions impacting the consumer and industrial business, both domestically and internationally. The Company's results could differ materially from those anticipated in the forward-looking statements as a result of a variety of factors, including risks described below and elsewhere. See "Forward-Looking Statements" at the beginning of this Annual Report.

Risks Related to the Company's Business

The Company's business is largely dependent upon domestic and international oil and natural gas industry spending, as well as consumer trends in the Company's consumer and industrial business. Spending could be adversely affected by industry conditions, consumer trends or by new or increased governmental regulations, global economic conditions, the availability of credit, and lower oil and natural gas prices. All of these factors are beyond the Company's control. The resulting reductions in customers' expenditures could have a significant adverse effect on Company revenue, margins, and overall operating results.

The Company's energy segment is dependent upon customers' willingness to make operating and capital expenditures for exploration, development and production of oil and natural gas in both North American and global markets. Customers' expectations of a decline in future oil and natural gas market prices could result in curtailed spending, thereby reducing demand for the Company's products and services. Industry conditions are influenced by numerous factors over which the Company has no control, including the supply of and demand for oil and natural gas, domestic and international economic conditions, political instability in oil and natural gas producing countries and merger and divestiture activity among oil and natural gas producers and service companies.

The price for oil and natural gas is subject to a variety of factors, including, but not limited to:

- global demand for energy as a result of population growth, economic development, and general economic and business conditions;
- the ability of the Organization of Petroleum Exporting Countries ("OPEC") to set and maintain production levels and the impact of non-OPEC producers on global supply;
- availability and quantity of natural gas storage;
- import and export volumes and pricing of liquefied natural gas;
- pipeline capacity to critical markets;
- political and economic uncertainty and socio-political unrest;
- cost of exploration, production and transport of oil and natural gas;
- technological advances impacting energy production and consumption; and
- weather conditions.

The volatility of oil and natural gas prices and the consequential effect on exploration and production activity could adversely impact the activity levels of the Company's customers.

One indicator of drilling and completion spending is drilling activity as measured by rig count, which the Company actively monitors to gauge market conditions and forecast product and service demand. In addition, the U.S. Energy Information Administration ("EIA") and other industry data sources report completion activity which is utilized by the Company. A reduction in drilling and completion activity could cause a decline in the demand for, or negatively affect the price of, some of the Company's products and services. Domestic demand for oil and natural gas could also be uniquely affected by public attitude regarding drilling in environmentally sensitive areas, vehicle emissions and other environmental standards, alternative fuels, taxation of oil and gas, perception of "excess profits" of oil and gas companies, and anticipated changes in governmental regulation and policy.

Volatile economic conditions could weaken customer exploration and production expenditures, causing reduced demand for the Company's products and services and a significant adverse effect on the Company's operating results. It is difficult to predict the pace of industry growth, the direction of oil and natural gas prices, the direction and magnitude of economic activity, and to what extent these conditions could affect the Company. However, reduced cash flow and capital availability could adversely impact the financial condition of the Company's customers, which could result in customer project modifications, delays or cancellations, general business disruptions, and delay in, or nonpayment of, amounts that are owed to the Company. This could cause a negative impact on the Company's results

of operations and cash flows.
The Company's consumer and industrial business is dependent on consumer demand for environmentally preferred solvents, as well as flavors and fragrances that are based on the unique attributes of citrus oils. Synthetic and bio-derived chemicals compete with the Company's line of naturally derived products and could affect future demand. Furthermore, if certain of the Company's suppliers were to experience significant cash flow constraints or become insolvent as a result of such conditions, a reduction or interruption in supplies or a significant increase in the price of supplies could occur, adversely impacting the Company's results of operations and cash flows.
The Company's inability to develop and/or introduce new products or differentiate existing products could have an adverse effect on its ability to be responsive to customers' needs and could result in a loss of customers, as well as adversely affecting the Company's future success and profitability.

The oil and natural gas industry is characterized by technological advancements that have historically resulted in, and will likely continue to result in, substantial improvements in the scope and quality of oilfield chemistries and their function and performance. Consequently, the Company's future success is dependent, in part, upon the Company's continued ability to timely develop innovative products and services. Increasingly sophisticated customer needs and the ability to anticipate and respond to technological and operational advances in the oil and natural gas industry is critical. If the Company fails to successfully develop and introduce innovative products and services that appeal to customers, or if existing or new market competitors develop superior products and services, the Company's revenue and profitability could deteriorate.

Consumer and industrial chemistry markets that purchase the Company's citrus-based products are largely influenced by consumer preference and regulatory requirements. While citrus-based beverage flavorings, retail cleaning products, and fine fragrances perpetually rank high in consumer surveys, the Company's continued success requires new product innovation to keep pace with consumer trends and regulatory issues. If the Company fails to provide innovative products and services to its customers or to introduce performance products that comply with new environmental regulations, the Company's financial performance could be impacted.

Increased competition could exert downward pressure on prices charged for the Company's products and services.

The Company operates in a competitive environment characterized by large and small competitors. Competitors with greater resources and lower cost structures or who are trying to gain market share may be successful in providing competing products and services to the Company's customers at lower prices than the Company currently charges. This may require the Company to lower its prices, resulting in an adverse impact on revenues, margins, and operating results.

If the Company is unable to adequately protect intellectual property rights or is found to infringe upon the intellectual property rights of others, the Company's business is likely to be adversely affected.

The Company relies on a combination of patents, trademarks, copyrights, trade secrets, non-disclosure agreements, and other security measures to establish and protect the Company's intellectual property rights. Although the Company believes that existing measures are reasonably adequate to protect intellectual property rights, there is no assurance that the measures taken will prevent misappropriation of proprietary information or dissuade others from independent development of similar products or services. Moreover, there is no assurance that the Company will be able to prevent competitors from copying, reverse engineering, modifying, or otherwise obtaining and/or using the Company's technology and proprietary rights to create competitive products or services. The Company may not be able to enforce intellectual property rights outside of the U.S. Additionally, the laws of certain

countries in which the Company's products and services are manufactured or marketed may not protect the Company's proprietary rights to the same extent as do the laws of the U.S. Furthermore, other third parties may infringe, challenge, invalidate, or circumvent the Company's patents, trademarks, copyrights and trade secrets. In each case, the Company's ability to compete could be significantly impaired.

A portion of the Company's products and services are without patent protection. The issuance of a patent does not guarantee validity or enforceability. The Company's patents may not necessarily be valid or enforceable against third parties. The issuance of a patent does not guarantee that the Company has the right to use the patented invention. Third parties may have blocking patents that could be used to prevent the Company from marketing the Company's own patented products and services and utilizing the Company's patented technology.

The Company is exposed and, in the future, may be exposed to allegations of patent and other intellectual property infringement from others. The Company may allege infringement of its patents and other intellectual property rights against others. Under either scenario, the Company could become involved in costly litigation or other legal proceedings regarding its patent or other intellectual property rights, from both an enforcement and defensive standpoint. Even if the Company chooses to enforce its patent or other intellectual property rights against a third party, there may be risk that the Company's patent or other intellectual property rights become invalidated or otherwise unenforceable through legal proceedings. If intellectual property infringement claims are asserted against the Company, the Company could defend itself from such assertions or could seek to obtain a license under the third party's intellectual property rights in order to mitigate exposure. In the event the Company cannot obtain a license, third parties could file lawsuits or other legal proceedings against the Company, seeking damages (including treble damages) or an injunction against the manufacture, use, sale, offer for sale, or importation of the Company's products and services. These could result in the Company having to discontinue the use, manufacture, and sale of certain products and services, increase the cost of selling certain products and services, or result in damage to the Company's reputation. An award of damages, including material royalty payments, or the entry of an injunction order against the use, manufacture, and sale of any of the Company's products and services found to be infringing, could have an adverse effect on the Company's results of operations and ability to compete.

The loss of key customers could have an adverse impact on the Company's results of operations and could result in a decline in the Company's revenue.

The Company has critical customer relationships which are dependent upon production and development activity related to a handful of customers. In the two segments reported in continuing operations, revenue derived from the Company's three largest customers as a percentage of consolidated revenue for the years ended December 31, 2017, 2016, and

2015, totaled 27%, 36%, and 43%, respectively. Customer relationships are historically governed by purchase orders or other short-term contractual obligations as opposed to long-term contracts. The loss of one or more key customers could have an adverse effect on the Company’s results of operations and could result in a decline in the Company’s revenue.

Loss of key suppliers, the inability to secure raw materials on a timely basis, or the Company’s inability to pass commodity price increases on to customers could have an adverse effect on the Company’s ability to service customer’s needs and could result in a loss of customers.

Materials used in servicing and manufacturing operations, as well as those purchased for sale, are generally available on the open market from multiple sources. Acquisition costs and transportation of raw materials to Company facilities have historically been impacted by extreme weather conditions. Certain raw materials used by the Energy Chemistry Technologies and the Consumer and Industrial Chemistry Technologies segments are available only from limited sources; accordingly, any disruptions to critical suppliers’ operations could adversely impact the Company’s operations. Prices paid for raw materials could be affected by energy products and other commodity prices; weather and disease associated with the Company’s crop dependent raw materials, specifically citrus greening; tariffs and duties on imported materials; foreign currency exchange rates; and phases of the general business cycle and global demand. The Energy Chemistry Technologies and the Consumer and Industrial Chemistry Technologies segments secure short and long term supply agreements for critical raw materials from both domestic and international vendors.

The prices of key raw materials including citrus terpenes and natural polymers (guar) are subject to market fluctuations which at times can be significant and unpredictable. The Company may be unable to pass along price increases to its customers, which could result in an adverse impact on margins and operating profits. The Company currently uses purchasing strategies designed, where possible, to align the timing of customer demand with supply commitments. However, the Company currently does not hedge commodity prices, but may consider such strategies in the future, and there is no guarantee that the Company’s purchasing strategies will prevent cost increases from resulting in adverse impacts on margins and operating profits.

If the Company loses the services of key members of management, the Company may not be able to manage operations and implement growth strategies.

The Company depends on the continued service of the Chief Executive Officer and President, the Chief Financial Officer, the Executive Vice President of Operations, and other key members of the executive management team, who possess significant expertise and knowledge of the Company’s business and industry. Furthermore, the Chief Executive Officer and President serves as Chairman of the Board of Directors. The Company has entered into employment

agreements with certain of these key members; however, at December 31, 2017, the Company only carries key man life insurance for the Chief Executive Officer and the Executive Vice President of Operations. Any loss or interruption of the services of key members of the Company’s management could significantly reduce the Company’s ability to manage operations effectively and implement strategic business initiatives. Effective February 13, 2017, Robert M. Schmitz retired as the Company’s Executive Vice President and Chief Financial Officer. On June 30, 2017, Steven A. Reeves retired as the Company’s Executive Vice President of Operations. On October 7, 2017, Robert C. Bodnar departed from the Company as the Executive Vice President and Performance and Transformation Officer. The Company can provide no assurance that appropriate replacements for key positions could be found should the need arise.

Failure to maintain effective disclosure controls and procedures and internal controls over financial reporting could have an adverse effect on the Company’s operations and the trading price of the Company’s common stock.

Effective internal controls are necessary for the Company to provide reliable financial reports, effectively prevent fraud and operate successfully as a public company. If the Company cannot provide reliable financial reports or effectively prevent fraud, the Company’s reputation and operating results could be harmed. If the Company is unable to maintain effective disclosure controls and procedures and internal controls over financial reporting, the Company may not be able to provide reliable financial reports, which in turn could affect the Company’s operating results or cause the Company to fail to meet its reporting obligations. Ineffective internal controls could also cause investors to lose confidence in reported financial information, which could negatively affect the trading price of the Company’s common stock, limit the ability of the Company to access capital markets in the future, and require additional costs to improve internal control systems and procedures.

Network disruptions, security threats and activity related to global cyber-crime pose risks to our key operational, reporting and communication systems.

The Company relies on access to information systems for its operations. Failures of, or interference with, access to these systems, such as network communications disruptions, could have an adverse effect on our ability to conduct operations and could directly impact consolidated reporting. Security breaches pose a risk to confidential data and intellectual property, which could result in damages to our competitiveness and reputation. The Company has policies and procedures in place, including system monitoring and data back-up processes, to prevent or mitigate the effects of these potential disruptions or breaches. However, there can be no assurance that existing or emerging threats will not have an adverse impact on our systems or communications networks.

The Company may pursue strategic acquisitions, joint ventures, and strategic divestitures, which could have an adverse impact on the Company's business.

The Company's past and potential future acquisitions, joint ventures, and divestitures involve risks that could adversely affect the Company's business. Negotiations of potential acquisitions, joint ventures, or other strategic relationships, integration of newly acquired businesses, and/or sales of existing businesses could be time consuming and divert management's attention from other business concerns. Acquisitions and joint ventures could also expose the Company to unforeseen liabilities or risks associated with new markets or businesses. Unforeseen operational difficulties related to acquisitions and joint ventures could result in diminished financial performance or require a disproportionate amount of the Company's management's attention and resources. Additionally, acquisitions could result in the commitment of capital resources without the realization of anticipated returns. Divestitures could result in the loss of future earnings without adequate compensation and the loss of unrealized strategic opportunities.

If the Company does not manage the potential difficulties associated with expansion successfully, the Company's operating results could be adversely affected.

The Company has grown over the last several years through internal growth, strategic alliances, and strategic business and asset acquisitions. The Company believes future success will depend, in part, on the Company's ability to adapt to market opportunities and changes, to successfully integrate the operations of any businesses acquired, expansion of existing product and service lines, and potentially expand into new product and service areas in which the Company may not have prior experience. Factors that could result in strategic business difficulties include, but are not limited to:

- failure to effectively integrate acquisitions, joint ventures or strategic alliances;
- failure to effectively plan for risks associated with expansion into areas in which management lacks prior experience;
- lack of experienced management personnel;
- increased administrative burdens;
- lack of customer retention;
- technological obsolescence; and
- infrastructure, technological, communication and logistical problems associated with large, expansive operations.

If the Company fails to manage potential difficulties successfully, the Company's operating results could be adversely impacted.

The Company's ability to grow and compete could be adversely affected if adequate capital is not available.

The ability of the Company to grow and be competitive in the market place is dependent on the availability of adequate capital. Access to capital is dependent, in large part, on the Company's cash flows and the availability of and access to equity and debt financing. The Company's revolving loan agreements require approval and place limits on certain capital transactions and various business acquisitions and combinations. The Company cannot guarantee that cash flows will be sufficient, or that the Company will continue to be able to obtain equity or debt financing on acceptable terms, or at all. As a result, the Company may not be able to finance strategic growth plans, take advantage of business opportunities, or to respond to competitive pressures. The Company filed a "universal" shelf registration on September 21, 2017, to permit the ability to sell securities to the public in a timely manner and which it expects to keep active.

The Company's revolving credit facility has variable interest rates that could increase.

At December 31, 2017, the Company had a $75 million revolving credit facility commitment subject to collateral availability limits. The interest rate on advances under the revolving credit facility varies based on the level of borrowing. Rates range (a) between PNC Bank's base lending rate plus 1.5% to 2.0% or (b) between the London Interbank Offered Rate (LIBOR) plus 2.5% to 3.0%. The Company is required to pay a monthly facility fee of 0.25% per annum, on any unused amount under the commitment based on daily averages. The current credit facility remains in effect until May 10, 2022.

There can be no assurance that the revolving credit facility will not experience significant interest rate increases.

Failure to collect for goods and services sold to key customers could have an adverse effect on the Company's financial results, liquidity and cash flows.

The Company performs credit analysis on potential customers; however, credit analysis does not provide full assurance that customers will be willing and/or able to pay for goods and services purchased from the Company. Furthermore, collectability of international sales can be subject to the laws of foreign countries, which may provide more limited protection to the Company in the event of a dispute over payment. Because sales to domestic and international customers are generally made on an unsecured basis, there can be no assurance of collectability. If one or more major customers are unwilling or unable to pay its debts to the Company, it could have an adverse effect of the Company's financial results, liquidity and cash flows.

Unforeseen contingencies such as litigation could adversely affect the Company's financial condition.

The Company is, and from time to time may become, a party to legal proceedings incidental to the Company's business involving alleged injuries arising from the use of Company products, exposure to hazardous substances, patent infringement, employment matters, commercial disputes, and shareholder lawsuits. The defense of these lawsuits may require significant expenses, divert management's attention, and may require the Company to pay damages that could adversely affect the Company's financial condition. In addition, any insurance or indemnification rights that the Company may have may be insufficient or unavailable to protect against potential loss exposures.

The Company's current insurance policies may not adequately protect the Company's business from all potential risks.

The Company's operations are subject to risks inherent in the oil and natural gas industry, such as, but not limited to, accidents, blowouts, explosions, fires, severe weather, oil and chemical spills, and other hazards. These conditions can result in personal injury or loss of life, damage to property, equipment and the environment, as well as suspension of customers' oil and gas operations. These events could result in damages requiring costly repairs, the interruption of Company business, including the loss of revenue and profits, and/or the Company being named as a defendant in lawsuits asserting large claims. The Company maintains insurance coverage it believes is adequate and customary to the oil and natural gas services industry to mitigate liabilities associated with these potential hazards. The Company does not have insurance against all foreseeable risks. Consequently, losses and liabilities arising from uninsured or underinsured events could have an adverse effect on the Company's business, financial condition, and results of operations.

Regulatory pressures, environmental activism, and legislation could result in reduced demand for the Company's products and services, increase the Company's costs, and adversely affect the Company's business, financial condition, and results of operations.

Regulations restricting volatile organic compounds ("VOC") exist in many states and/or communities which limit demand for certain products. Although citrus oil is considered a VOC, its health, safety, and environmental profile is preferred over other solvents (e.g., BTEX), which is currently creating new market opportunities around the world. Changes in the perception of citrus oils as a preferred VOC, increased consumer activism against hydraulic fracturing or other regulatory or legislative actions by governments could potentially result in materially reduced demand for the Company's products and services and could adversely affect the Company's business, financial condition, and results of operations.

The Company is subject to complex foreign, federal, state, and local environmental, health, and safety laws and regulations, which expose the Company to liabilities that could adversely affect the Company's business, financial condition, and results of operations.

The Company's operations are subject to foreign, federal, state, and local laws and regulations related to, among other things, the protection of natural resources, injury, health and safety considerations, chemical exposure assessment, waste management, and transportation of waste and other hazardous materials. The Company's operations expose the Company to risks of environmental liability that could result in fines, penalties, remediation, property damage, and personal injury liability. In order to remain compliant with laws and regulations, the Company maintains permits, authorizations, registrations, and certificates as required from regulatory authorities. Sanctions for noncompliance with such laws and regulations could include assessment of administrative, civil and criminal penalties, revocation of permits, and issuance of corrective action orders.

The Company could incur substantial costs to ensure compliance with existing and future laws and regulations. Laws protecting the environment have generally become more stringent and are expected to continue to evolve and become more complex and restrictive into the future. Failure to comply with applicable laws and regulations could result in material expense associated with future environmental compliance and remediation. The Company's costs of compliance could also increase if existing laws and regulations are amended or reinterpreted. Such amendments or reinterpretations of existing laws or regulations, or the adoption of new laws or regulations, could curtail exploratory or developmental drilling for, and production of, oil and natural gas which, in turn, could limit demand for the Company's products and services. Some environmental laws and regulations could also impose joint and strict liability, meaning that the Company could be exposed in certain situations to increased liabilities as a result of the Company's conduct that was lawful at the time it occurred or conduct of, or conditions caused by, prior operators or other third parties. Remediation expense and other damages arising as a result of such laws and regulations could be substantial and have a material adverse effect on the Company's financial condition and results of operations.

Material levels of the Company’s revenue are derived from customers engaged in hydraulic fracturing services, a process that creates fractures extending from the well bore through the rock formation to enable natural gas or oil to flow more easily through the rock pores to a production well. Some states have adopted regulations which require operators to publicly disclose certain non-proprietary information. These regulations could require the reporting and public disclosure of the Company’s proprietary chemistry formulas. The adoption of any future federal or state laws or local requirements, or the implementation of regulations imposing reporting obligations on, or otherwise limiting, the hydraulic fracturing process, could increase the difficulty of oil and natural gas well production activity and could have an adverse effect on the Company’s future results of operations.

Regulation of greenhouse gases and/or climate change could have a negative impact on the Company’s business.

Certain scientific studies have suggested that emissions of certain gases, commonly referred to as “greenhouse gases,” which include carbon dioxide, methane, and other volatile organic compounds, may be contributory to the warming effect of the Earth's atmosphere and other climatic changes. In response to such studies, the issue of climate change and the effect of greenhouse gas emissions, in particular emissions from fossil fuels, is attracting increasing worldwide attention. For example, the Paris Agreement was signed in 2016, which sets forth a global framework to address climate change. However, in June 2017, the Trump Administration announced plans to withdraw from the Paris Agreement. Legislation and regulatory initiatives at the federal, regional, state, and local level have been considered and in some cases adopted in an effort to reduce greenhouse gases. Some states have individually or in regional cooperation imposed restrictions on greenhouse gas emissions under various policies and approaches, including establishing a cap on emissions, requiring efficiency measures, or providing incentives for pollution reduction, use of renewable energy sources, or use of replacement fuels with lower carbon content.

Existing or future laws, regulations, treaties, or international agreements related to greenhouse gases, climate change, and indoor air quality, including energy conservation or alternative energy incentives, could have a negative impact on the Company's operations, if regulations resulted in a reduction in worldwide demand for oil, natural gas, and citrus oils. Other results could be increased compliance costs and additional operating restrictions, each of which could have a negative impact on the Company's operations.

Changes in regulatory compliance obligations of critical suppliers may adversely impact our operations.

The Dodd-Frank Wall Street Reform and Consumer Protection Act ("Dodd-Frank Act"), signed into law on July 21, 2010, includes Section 1502, which required the Securities and Exchange Commission to adopt additional disclosure requirements related to certain minerals sourced from the Democratic Republic of Congo and surrounding countries, or "conflict minerals," for which such conflict minerals are necessary to the functionality of a product manufactured, or contracted to be manufactured, by an SEC-reporting company. The metals covered by these rules include tin, tantalum, tungsten and gold. The Company and Company suppliers use some of these materials in their production processes.

In 2014, the Company established management systems and processes and completed due diligence in compliance with the requirements of Section 1502. Future requirements for conducting Conflict Minerals due diligence may result in significant increased costs to the Company. Furthermore, failure of key suppliers to provide evidence of conflict free materials could impact the Company's ability to acquire key raw materials and/or result in higher costs for those raw materials.

The Company and the Company's customers are subject to risks associated with doing business outside of the U.S., including political risk, foreign exchange risk, and other uncertainties.

Revenue from the sale of products to customers outside the U.S. has been steadily increasing. The Company and its customers are subject to risks inherent in doing business outside of the U.S., including, but not limited to:

- governmental instability;
- corruption;
- war and other international conflicts;
- civil and labor disturbances;
- requirements of local ownership;
- cartel behavior;
- partial or total expropriation or nationalization;
- currency devaluation; and
- foreign laws and policies, each of which can limit the movement of assets or funds or result in the deprivation of contractual rights or appropriation of property without fair compensation.

Collections from international customers and agents could also prove difficult due to inherent uncertainties in foreign law and judicial procedures. The Company could experience significant difficulty with collections or recovery due to the political or judicial climate in foreign countries where Company operations occur or in which the Company's products are used.

The Company's international operations must be compliant with the Foreign Corrupt Practices Act (the "FCPA") and other applicable U.S. laws. The Company could become liable under these laws for actions taken by employees or agents. Compliance with international laws and regulations could become more complex and expensive thereby creating increased risk as the Company's international business portfolio grows. Further, the U.S. periodically enacts laws and imposes regulations prohibiting or restricting trade with certain nations. The U.S. government could also change these laws or enact new laws that could restrict or prohibit the Company from doing business in identified foreign countries. The Company conducts, and will continue to conduct, business in currencies other than the U.S. dollar. Historically, the Company has not hedged against foreign currency fluctuations. Accordingly, the Company's profitability could be affected by fluctuations in foreign exchange rates.

The Company has no control over and can provide no assurances that future laws and regulations will not materially impact the Company's ability to conduct international business.

The Company's tax returns are subject to audit by tax authorities. Taxing authorities may make claims for back taxes, interest, and penalties.

The Company is subject to income, property, excise, employment, and other taxes in the U.S. and a variety of other jurisdictions around the world. Tax rules and regulations in the U.S. and around the world are complex and subject to interpretation. From time to time, taxing authorities conduct audits of the Company's tax filings and may make claims for increased taxes and, in some cases, assess interest and penalties. The assessments for back taxes, interest, and penalties could be significant. If the Company is unsuccessful in contesting these claims, the resulting payments could result in a drain on the Company's capital resources and liquidity.

Recently enacted U.S. tax legislation, as well as future U.S. tax legislation, may adversely affect our business, results of operations, financial condition and cash flow.

Comprehensive tax reform legislation enacted in December 2017, commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"), makes significant changes to U.S. federal income tax laws. The Tax Act, among other things, reduces the corporate income tax rate to 21%, partially limits the deductibility of business interest expense and net operating losses, imposes a one-time tax on unrepatriated earnings from certain foreign subsidiaries, taxes offshore earnings at reduced rates regardless of whether they are repatriated and allows the immediate deduction of certain new investments instead of deductions for depreciation expense over time. Although we have estimated the impact of the newly enacted tax legislation by incorporating assumptions based upon our current interpretation and analysis to date, the Tax Act is complex and far-reaching, and we have not completed our analysis of the actual impact of its enactment on us. There may be other material adverse effects resulting from the Tax Act that we have not identified and that could have an adverse effect on our business, results of operations, financial condition and cash flow.

Risks Related to the Company's Industries

General economic declines (recessions), limits to credit availability, and industry specific factors could have an adverse effect on energy industry activity, demand for flavor and fragrance products, and the Company's citrus based solvents resulting in lower demand for the Company's products and services.

Worldwide economic uncertainty can reduce the availability of liquidity and credit markets to fund the continuation and expansion of industrial business operations worldwide. The shortage of liquidity and credit combined with pressure on worldwide equity markets could continue to impact the worldwide economic climate. Geopolitical unrest around the world may also impact demand for the Company's products and services both domestically and internationally.

Demand for the Company's energy segment's products and services is dependent on oil and natural gas industry activity and expenditure levels that are directly affected by trends in oil and natural gas prices. Demand for the Company's energy products and services is particularly sensitive to levels of exploration, development, and production activity of, and the corresponding capital spending by, oil and natural gas companies, including national oil companies. One indication of drilling and completion activity and spending is rig count, which the Company monitors to gauge market conditions. In addition, the EIA and other industry data sources report

completion activity which is utilized by the Company. Any prolonged reduction in oil and natural gas prices or drop in rig and/or completion count could depress current levels of exploration, development, and production activity. Perceptions of longer-term lower oil and natural gas prices by oil and natural gas companies could similarly reduce or defer major expenditures given the long-term nature of many large-scale development projects. Lower levels of activity could result in a corresponding decline in the demand for the Company's oil and natural gas well products and services, which could have a material adverse effect on the Company's revenue and profitability.

The Company's consumer and industrial customers would be adversely affected if economic activity decreased dramatically. One of the Company's primary products, d-limonene, is often used to replace less desirable solvents in numerous consumer and industrial applications and is often more expensive than other materials. As economic activity decreases, consumer and industrial companies not only consume less solvent, they also may relax their environmental preferences and purchase cheaper solvents. Demand for the Company's flavor and fragrance ingredients could be negatively impacted as a result of a decline in demand for consumer based products containing these ingredients. The Company's revenue and profitability could be negatively impacted if demand for these products softens because of weak economic activity. Furthermore, the segment is a critical supplier of unique flavor and fragrance additives from citrus for use in major retail beverages and fragrances. Reformulations away from natural citrus ingredients by these major retail branded products would adversely affect the segment.

Events in global credit markets can significantly impact the availability of credit and associated financing costs for many of the Company's customers. Many of the Company's customers finance their drilling and completion programs through third-party lenders or public debt offerings. Lack of available credit or increased costs of borrowing could cause customers to reduce spending on drilling programs, thereby reducing demand and potentially resulting in lower prices for the Company's products and services. Also, the credit and economic environment could significantly impact the financial condition of some customers over a prolonged period, leading to business disruptions and restricted ability to pay for the Company's products and services. The Company's forward-looking statements assume that the Company's lenders, insurers, and other financial institutions will be able to fulfill their obligations under various credit agreements, insurance policies, and contracts. If any of the Company's significant lenders, insurers and others are unable to perform under such agreements, and if the Company was unable to find suitable replacements at a reasonable cost, the Company's results of operations, liquidity, and cash flows could be adversely impacted.

A continuing period of depressed oil and natural gas prices could result in further reductions in demand for the

Company's products and services and adversely affect the Company's business, financial condition, and results of operations.

The markets for oil and natural gas have historically been volatile. Such volatility in oil and natural gas prices, or the perception by the Company's customers of unpredictability in oil and natural gas prices, could adversely affect spending levels. The oil and natural gas markets may be volatile in the future. The demand for the Company's products and services is, in large part, driven by general levels of exploration and production spending and drilling activity by its customers. Future declines in oil or natural gas prices could adversely affect the Company's business, financial condition, and results of operations.

New and existing competitors within the Company's industries could have an adverse effect on results of operations.

The oil and natural gas industry is highly competitive. The Company's principal competitors include numerous small companies capable of competing effectively in the Company's markets on a local basis, as well as a number of large companies that possess substantially greater financial and other resources than does the Company. Larger competitors may be able to devote greater resources to developing, promoting, and selling products and services. The Company may also face increased competition due to the entry of new competitors including current suppliers that decide to sell their products and services directly to the Company's customers. As a result of this competition, the Company could experience lower sales or greater operating costs, which could have an adverse effect on the Company's margins and results of operations.

The Company's industry has a high rate of employee turnover. Difficulty attracting or retaining personnel or agents could adversely affect the Company's business.

The Company operates in an industry that has historically been highly competitive in securing qualified personnel with the required technical skills and experience. The Company's services require skilled personnel able to perform physically demanding work. Due to industry volatility, the demanding nature of the work, and the need for industry specific knowledge and technical skills, current employees could choose to pursue employment opportunities outside the Company that offer a more desirable work environment and/or higher compensation than is offered by the Company. As a result of these competitive labor conditions, the Company may not be able to find qualified labor, which could limit the Company's growth. In addition, the cost of attracting and retaining qualified personnel has increased over the past several years due to competitive pressures. In order to attract and retain qualified personnel, the Company may be required to offer increased wages and benefits. If the Company is unable to increase the prices of products and services to compensate for increases in compensation, or is unable to attract and retain

qualified personnel, operating results could be adversely affected.

Severe weather could have an adverse impact on the Company's business.

The Company's business could be materially and adversely affected by severe weather conditions. Hurricanes, tropical storms, flash floods, blizzards, cold weather, and other severe weather conditions could result in curtailment of services, damage to equipment and facilities, interruption in transportation of products and materials, and loss of productivity. If the Company's customers are unable to operate or are required to reduce operations due to severe weather conditions, and as a result curtail purchases of the Company's products and services, the Company's business could be adversely affected.

A terrorist attack or armed conflict could harm the Company's business.

Terrorist activities, anti-terrorist efforts, and other armed conflicts involving the U.S. could adversely affect the U.S. and global economies and could prevent the Company from meeting financial and other obligations. The Company could experience loss of business, delays or defaults in payments from payors, or disruptions of fuel supplies and markets if pipelines, production facilities, processing plants, or refineries are direct targets or indirect casualties of an act of terror or war. Such activities could reduce the overall demand for oil and natural gas which, in turn, could also reduce the demand for the Company's products and services. Terrorist activities and the threat of potential terrorist activities and any resulting economic downturn could adversely affect the Company's results of operations, impair the ability to raise capital, or otherwise adversely impact the Company's ability to realize certain business strategies.

Risks Related to the Company's Securities

The market price of the Company's common stock has been and may continue to be volatile.

The market price of the Company’s common stock has historically been subject to significant fluctuations. The following factors, among others, could cause the price of the Company’s common stock to fluctuate significantly due to:

- variations in the Company’s quarterly results of operations;
- changes in market valuations of companies in the Company’s industry;
- fluctuations in stock market prices and volume;
- fluctuations in oil and natural gas prices;
- issuances of common stock or other securities in the future;
- additions or departures of key personnel;
- announcements by the Company or the Company’s competitors of new business, acquisitions, or joint ventures; and

- negative statements made by external parties, about the Company’s business, in public forums.

The stock market has experienced significant price and volume fluctuations in recent years that have affected the price of common stock of companies within many industries including the oil and natural gas industry. The price of the Company’s common stock could fluctuate based upon factors that have little to do with the Company’s operational performance, and these fluctuations could materially reduce the Company’s stock price. The Company could be a defendant in a legal case related to a significant loss of value for the shareholders. This could be expensive and divert management’s attention and Company resources, as well as have an adverse effect on the Company’s business, financial condition, and results of operations.

An active market for the Company’s common stock may not continue to exist or may not continue to exist at current trading levels.

Trading volume for the Company’s common stock historically has been very volatile when compared to companies with larger market capitalizations. The Company cannot presume that an active trading market for the Company’s common stock will continue or be sustained. Sales of a significant number of shares of the Company’s common stock in the public market could lower the market price of the Company’s stock.

The Company has no plans to pay dividends on the Company’s common stock, and, therefore, investors will have to look to stock appreciation for return on investments.

The Company does not anticipate paying any cash dividends on the Company’s common stock within the foreseeable future. The Company currently intends to retain future earnings to fund the development and growth of the Company’s business and to meet current debt obligations. Any payment of future dividends will be at the discretion of the Company’s board of directors and will depend, among other things, on the Company’s earnings, financial condition, capital requirements, level of indebtedness, statutory and contractual restrictions applying to the payment of dividends, and other considerations deemed relevant by the board of directors. Additionally, the Company’s current credit facility restricts the payment of dividends without the prior written consent of the lenders. Investors must rely on sales of common stock held after price appreciation, which may never occur, in order to realize a return on their investment.

Certain anti-takeover provisions of the Company’s charter documents and applicable Delaware law could discourage or prevent others from acquiring the Company, which may adversely affect the market price of the Company’s common stock.

The Company’s certificate of incorporation and bylaws contain provisions that:

- permit the Company to issue, without stockholder approval, up to 100,000 shares of preferred stock, in one or more series and, with respect to each series, to fix the designation, powers, preferences, and rights of the shares of the series;
- prohibit stockholders from calling special meetings;
- limit the ability of stockholders to act by written consent;
- prohibit cumulative voting; and
- require advance notice for stockholder proposals and nominations for election to the board of directors to be acted upon at meetings of stockholders.

In addition, Section 203 of the Delaware General Corporation Law limits business combinations with owners of more than 15% of the Company’s stock without the approval of the board of directors. Aforementioned provisions and other similar provisions make it more difficult for a third party to acquire the Company exclusive of negotiation. The Company’s board of directors could choose not to negotiate with an acquirer deemed not beneficial to or synergistic with the Company’s strategic outlook. If an acquirer were discouraged from offering to acquire the Company or prevented from successfully completing a hostile acquisition by these anti-takeover measures, stockholders could lose the opportunity to sell their shares at a favorable price.

Future issuance of additional shares of common stock could cause dilution of ownership interests and adversely affect the Company’s stock price.

The Company is currently authorized to issue up to 80,000,000 shares of common stock. The Company may, in the future, issue previously authorized and unissued shares of common stock, which would result in the dilution of current

stockholders ownership interests. Additional shares are subject to issuance through various equity compensation plans or through the exercise of currently outstanding options. The potential issuance of additional shares of common stock may create downward pressure on the trading price of the Company’s common stock. The Company may also issue additional shares of common stock or other securities that are convertible into or exercisable for common stock in order to raise capital or effectuate other business purposes. Future sales of substantial amounts of common stock, or the perception that sales could occur, could have an adverse effect on the price of the Company’s common stock.
The Company filed a “universal” shelf registration on September 21, 2017, to permit the ability to sell securities to the public in a timely manner and which it expects to keep active.
The Company may issue shares of preferred stock or debt securities with greater rights than the Company’s common stock.
Subject to the rules of the NYSE, the Company’s certificate of incorporation authorizes the board of directors to issue one or more additional series of preferred stock and to set the terms of the issuance without seeking approval from holders of

common stock. Currently, there are 100,000 preferred shares authorized, with no shares currently outstanding. Any preferred stock that is issued may rank senior to common stock in terms of dividends, priority and liquidation premiums, and may have greater voting rights than holders of common stock.

The Company’s ability to use net operating loss carryforwards and tax attribute carryforwards to offset future taxable income may be limited as a result of transactions involving the Company’s common stock.

Under section 382 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an “ownership change” is subject to limitations on the Company’s ability to utilize pre-change net operating losses (“NOLs”), and certain other tax attributes to offset future taxable income. In general, an ownership change occurs if the aggregate stock ownership of certain stockholders increases by more than 50 percentage points over such stockholders’ lowest percentage ownership during the testing period (generally three years). An ownership change could limit the Company’s ability to utilize existing NOLs and tax attribute carryforwards for taxable years including or following an identified “ownership change.” Transactions involving the Company’s common stock, even

those outside the Company’s control, such as purchases or sales by investors, within the testing period could result in an “ownership change.” In addition, under the Tax Act, the ability to carry back NOLs to prior taxable years is generally eliminated, and while NOLs arising in tax years beginning after 2017 may be carried forward indefinitely, these post-2017 NOLs may only reduce 80% of the Company’s taxable income in a tax year. Limitations imposed on the ability to use NOLs and tax credits to offset future taxable income could reduce or eliminate the benefit of the NOLs and tax attributes and could require the Company to pay U.S. federal income taxes in excess of that which would otherwise be required if such limitations were not in effect. Similar rules and limitations may apply for state income tax purposes.

Disclaimer of Obligation to Update

Except as required by applicable law or regulation, the Company assumes no obligation (and specifically disclaims any such obligation) to update these risk factors or any other forward-looking statement contained in this Annual Report to reflect actual results, changes in assumptions, or other factors affecting such forward-looking statements.

Item 1B. Unresolved Staff Comments.

Not applicable.

Item 2. Properties.

At December 31, 2017, the Company operated 18 manufacturing, warehouse, and research facilities in 9 U.S. states, one research facility in Calgary, Alberta, and sales offices in Tokyo, Japan and Dubai, United Arab Emirates. The Company owns 7 of these facilities and the remainder are leased with lease terms that expire from 2018 through 2031. In addition, the Company’s corporate office is a leased facility located in Houston, Texas. The following table sets forth facility locations:

Segment	Owned/Leased	Location
Energy Chemistry Technologies	Owned	Carthage, Texas
	Owned	Dalton, Georgia
	Owned	Marlow, Oklahoma
	Owned	Monahans, Texas
	Owned	Waller, Texas
	Leased	Calgary, Alberta
	Leased	Denver, Colorado
	Leased	Dubai, United Arab Emirates
	Leased	Houston, Texas

Segment	Owned/Leased	Location
Energy Chemistry	Leased	Hurst, Texas

Technologies		
	Leased	Midland, Texas
	Leased	Natoma, Kansas
	Leased	Pittsburgh, Pennsylvania
	Leased	Plano, Texas
	Leased	Raceland, Louisiana
Consumer and Industrial Chemistry Technologies	Owned	Winter Haven, Florida
	Leased	Tokyo, Japan
Discontinued Operations	Owned	Vernal, Utah
	Leased	Odessa, Texas
	Leased	Pittsburgh, Pennsylvania
	Leased	Wysox, Pennsylvania

The Company considers owned and leased facilities to be in good condition and suitable for the conduct of business.

Item 3. Legal Proceedings.

Class Action Litigation

On March 30, 2017, the U.S. District Court for the Southern District of Texas granted the Company's motion to dismiss the four consolidated putative securities class action lawsuits that were filed in November 2015, against the Company and certain of its officers. The lawsuits were previously consolidated into a single case, and a consolidated amended complaint had been filed. The consolidated amended complaint asserted that the Company made false and/or misleading statements, as well as failed to disclose material adverse facts about the Company's business, operations, and prospects. The complaint sought an award of damages in an unspecified amount on behalf of a putative class consisting of persons who purchased the Company's common stock between October 23, 2014 and November 9, 2015, inclusive. The lead plaintiff appealed the District Court's decision granting the motion to dismiss.

In January 2016, three derivative lawsuits were filed, two in the District Court of Harris County, Texas (which have since been consolidated into one case), and one in the United States District Court for the Southern District of Texas, on behalf of the Company against certain of its officers and its current directors. The lawsuits allege violations of law, breaches of fiduciary duty, and unjust enrichment against the defendants.

The Company believes the lawsuits are without merit and intends to vigorously defend against all claims asserted. Discovery has not yet commenced. At this time, the Company is unable to reasonably estimate the outcome of this litigation.

In addition, as previously disclosed, the U.S. Securities and Exchange Commission had opened an inquiry related to similar issues to those raised in the above-described litigation. On August 21, 2017, the Company received a letter from the staff of the SEC stating that the inquiry has been concluded and that the staff does not intend to recommend an enforcement action against the Company.

Other Litigation

The Company is subject to routine litigation and other claims that arise in the normal course of business. Management is not aware of any pending or threatened lawsuits or proceedings that are expected to have a material effect on the Company's financial position, results of operations or liquidity.

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.

The Company’s common stock began trading on the NYSE on December 27, 2007 under the stock ticker symbol “FTK.” As of the close of business on January 31, 2018, there were 56,756,480 shares of common stock outstanding held by approximately 14,800 holders of record. The Company’s closing sale price of the common stock on the NYSE on January 31, 2018 was $5.50. The Company has never declared

or paid cash dividends on common stock. While the Company regularly assesses the dividend policy, the Company has no current plans to declare dividends on its common stock and intends to continue to use earnings and other cash in the maintenance and expansion of its business. Further, the Company’s credit facility contains provisions that limit its ability to pay cash dividends on its common stock.

The following table sets forth, on a per share basis for the periods indicated, the high and low closing sales prices of common stock as reported by the NYSE. These prices do not include retail mark-ups, mark-downs or commissions.

Fiscal quarter ended:	2017		2016	
	High	Low	High	Low
March 31,	$14.12	$9.50	$11.11	$5.52
June 30,	$12.85	$7.95	$13.82	$6.73
September 30,	$9.34	$4.65	$16.60	$12.88
December 31,	$5.31	$4.28	$14.84	$8.96

Stock Performance Graph

The performance graph below illustrates a five year comparison of cumulative total returns based on an initial investment of $100 in the Company's common stock, as compared with the Russell 2000 Index and the Philadelphia Oil Services Index for the period beginning December 31, 2012 through December 31, 2017. The performance graph assumes $100 invested on December 31, 2012 in each of the Company's common stock, the Russell 2000 Index, and the Philadelphia Oil Service Index and that all dividends were reinvested.

The following graph should not be deemed to be filed as part of this Annual Report, does not constitute soliciting material, and should not be deemed filed or incorporated by reference into any other filing of the Company under the Securities Act of 1933, as amended, or the Exchange Act, as amended, except to the extent the Company specifically incorporates the graph by reference.

	December 31,					
	2012	2013	2014	2015	2016	2017
Flotek Industries, Inc.	$100	$165	$154	$94	$77	$38
Russell 2000 Index	$100	$137	$142	$134	$160	$181
Philadelphia Oil Service Index (OSX)	$100	$128	$96	$72	$83	$68

Securities Authorized for Issuance Under Equity Compensation Plans

Equity compensation plan information relating to equity securities authorized for issuance under individual compensation agreements at December 31, 2017 is as follows:

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights[1] (a)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights[2] (b)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column(a)) (c)
Equity compensation plans approved by security holders	971,589	$ —	303,248
Equity compensation plans not approved by security holders	—	$ —	—
Total	971,589	$ —	303,248

(1) Includes shares for outstanding stock options (0 shares), restricted stock awards (246,258 shares), and restricted stock unit share equivalents (725,331 shares).

(2) The weighted-average exercise price is for outstanding stock options only and does not include outstanding restricted stock awards or restricted stock unit share equivalents that have no exercise price.

Issuer Purchases of Equity Securities

In November 2012, the Company's Board of Directors authorized the repurchase of up to $25 million of the Company's common stock. Repurchases may be made in open market or privately negotiated transactions. Through December 31, 2017, the Company has repurchased $25 million of its common stock under this repurchase program.

In June 2015, the Company's Board of Directors authorized the repurchase of up to an additional $50 million of the Company's common stock. Repurchases may be made in open market or privately negotiated transactions. Through December 31, 2017, the Company has repurchased $0.3 million of its common stock under this authorization and $49.7 million may yet be used to purchase shares.

Repurchases of the Company's equity securities during the three months ended December 31, 2017 are as follows:

	Total Number of Shares Purchased [1]	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Dollar Value of Shares that May Yet be Purchased Under the Plans or Programs [2]
October 1 to October 31, 2017	5,003	$ 5.28	—	$50,733,939
November 1 to November 30, 2017	—	$ —	—	$50,733,939
December 1 to December 31, 2017	268,212	$ 4.59	225,000	$49,704,946
Total	273,215	$ 4.60	225,000	

(1) The Company purchases shares of its common stock (a) to satisfy tax withholding requirements and payment remittance obligations related to period vesting of restricted shares and exercise of non-qualified stock options, (b) to satisfy payments required for common stock upon the exercise of stock options, and (c) as part of a publicly announced repurchase program on the open market.

(2)

A covenant under the Company's Credit Facility limits the amount that may be used to repurchase the Company's common stock. At December 31, 2017, this covenant limits additional share repurchases to $9.7 million.

Item 6. Selected Financial Data.

The following table sets forth certain selected historical financial data and should be read in conjunction with Part II, Item 7 – “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and Part II, Item 8 – “Financial Statements and Supplementary Data” of this Annual Report. The selected operating and financial position data as of and for each of the five years presented has been derived from audited consolidated Company financial statements, some of which appear elsewhere in this Annual Report. Financial data has been adjusted for discontinued operations, as indicated.

During the fourth quarter of 2016, the Company initiated a strategic restructuring of its business to enable a greater focus on its core businesses in energy chemistry and consumer and industrial chemistry. During 2017, the Company completed the sale or disposal of the assets and transfer or liquidation of liabilities and obligations of each of the Drilling Technologies

and Production Technologies segments. The Company has classified the assets, liabilities, and results of operations for these two segments as “Discontinued Operations” for all periods presented.

During 2016 and 2015, the Company made one small acquisition each year, and in 2014, the Company made two small acquisitions. Insignificant non-recurring charges were incurred related to these acquisitions. The net income and non-recurring charges related to these acquisitions do not materially affect comparability.

Impairments recognized in 2016 and 2015 relate to the Drilling Technologies and Production Technologies segments and, therefore, are included in discontinued operations.

During 2013, the Company acquired Florida Chemical Company, Inc. for purchase consideration of $106.4 million.

	As of and for the year ended December 31,				
	2017	2016	2015	2014	2013
	(in thousands, except per share data)				
Operating Data					
Revenue [(1)]	$317,098	$262,832	$269,966	$319,852	$243,860
(Loss) income from operations [(1)]	(2,855)	(7,304)	12,278	58,619	37,360
(Loss) income from continuing operations [(1)]	$(13,053)	$1,907	$7,158	$39,622	$22,376
(Loss) income from discontinued operations, net of tax	(14,342)	(51,037)	(20,620)	13,981	13,802
Net (loss) income	$(27,395)	$(49,130)	$(13,462)	$53,603	$36,178

(1) Amounts exclude impact of discontinued operations.

Per Share Data					
Basic earnings (loss) per share:					
Continuing operations	$(0.23)	$0.03	$0.13	$0.73	$0.44
Discontinued operations, net of tax	(0.25)	(0.91)	(0.38)	0.26	0.27
Basic earnings (loss) per share	$(0.48)	$(0.88)	$(0.25)	$0.99	$0.71
Diluted earnings (loss) per share:					
Continuing operations	$(0.23)	$0.03	$0.13	$0.71	$0.42
Discontinued operations, net of tax	(0.25)	(0.91)	(0.37)	0.25	0.26
Diluted earnings (loss) per share	$(0.48)	$(0.88)	$(0.24)	$0.96	$0.68
Financial Position Data					
Total assets	$329,888	$383,215	$403,090	$423,276	$375,581
Convertible senior notes, long-term debt, and capital lease obligations, less discount and current portion	—	7,833	18,255	25,398	35,690
Stockholders’ equity	264,900	287,343	293,651	306,003	249,752

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 the related Notes to the Consolidated Financial Statements included elsewhere in this Annual Report. The following information contains forward-looking statements, which are subject to risks and uncertainties. Should one or more of these risks or uncertainties materialize, actual results could differ from those expressed or implied by the forward-looking statements. See “Forward-Looking Statements” at the beginning of this Annual Report.

Basis of Presentation

During the fourth quarter of 2016, the Company classified the Drilling Technologies and Production Technologies segments as held for sale based on management’s intention to sell these businesses. The Company’s historical financial statements have been revised to present the operating results of the Drilling Technologies and Production Technologies segments as discontinued operations. The results of operations of Drilling Technologies and Production Technologies are presented as “Loss from discontinued operations” in the statement of operations and the related cash flows of these segments has been reclassified to discontinued operations for all periods presented. The assets and liabilities of the Drilling Technologies and Production Technologies segments have been reclassified to “Assets held for sale” and “Liabilities held for sale”, respectively, in the consolidated balance sheet for all periods presented. During 2017, the Company completed the sale or disposal of the assets and transfer or liquidation of liabilities and obligations of these segments.

Results of operations of the Drilling Technologies and Production Technologies segments for the years ended December 31, 2016 and 2015 are discussed below.

Executive Summary

Flotek is a global, diversified, technology-driven company that develops and supplies chemistries and services to the oil and gas industries, and high value compounds to companies that make food and beverages, cleaning products, cosmetics, and other products that are sold in consumer and industrial markets. Flotek operates in over 20 domestic and international markets.

The Company’s oilfield business includes specialty chemistries and logistics which enable its customers in pursuing improved efficiencies in the drilling and completion of their wells. Customers include major integrated oil and gas (“O&G”) companies, oilfield services companies, independent O&G companies, pressure-pumping service companies, national and state-owned oil companies, and international supply chain management companies. The Company also produces non-energy-related citrus oil and related products including (1) high value compounds used as additives by companies in the flavors and fragrances markets

and (2) environmentally friendly chemistries for use in numerous industries around the world, including the O&G industry. The Company sources citrus oil domestically and internationally and is one of the largest processors of citrus oil in the world. Additionally, the Company also provides automated bulk material handling, loading facilities, and blending capabilities.

Continuing Operations

The operations of the Company are categorized into two reportable segments: Energy Chemistry Technologies and Consumer and Industrial Chemistry Technologies.

- Energy Chemistry Technologies designs, develops, manufactures, packages, and markets specialty chemistries used in O&G well drilling, cementing, completion, and stimulation. These technologies developed by Flotek’s Research and Innovation team enable customers to pursue improved efficiencies in the drilling and completion of wells.
- Consumer and Industrial Chemistry Technologies designs, develops, and manufactures products that are sold to companies in the flavor and fragrance industries and specialty chemical industry. These technologies are used by beverage and food companies, fragrance companies, and companies providing household and industrial cleaning products.

Discontinued Operations

- The Drilling Technologies and Production Technologies segments were sold during 2017 and are classified as discontinued operations.

- Drilling Technologies assembled, rented, sold, inspected, and marketed downhole drilling equipment used in energy, mining, and industrial drilling activities.
- Production Technologies assembled and marketed production-related equipment, including pumping system components, electric submersible pumps (“ESP”), gas separators, valves, and services that support natural gas and oil production activities.

Market Conditions

The Company’s success is sensitive to a number of factors, which include, but are not limited to, drilling and well completion activity, customer demand for its advanced technology products, market prices for raw materials, and governmental actions.

Drilling and well completion activity levels are influenced by a number of factors, including the number of rigs in operation and the geographical areas of rig activity. Additional factors that influence the level of drilling and well completion activity include:

- Historical, current, and anticipated future O&G prices,
- Federal, state, and local governmental actions that may encourage or discourage drilling activity,
- Customers' strategies relative to capital funds allocations,
- Weather conditions, and
- Technological changes to drilling and completion methods and economics.

Historical North American drilling activity is reflected in "TABLE A" below.

Customers' demand for advanced technology products and services provided by the Company are dependent on their recognition of the value of:

- Chemistries that improve the economics of their O&G operations,
- Chemistries that meet the need of consumer product markets, and
- Chemistries that are economically viable, socially responsible, and ecologically sound.

Market prices for commodities, including citrus oils and guar, can be influenced by:

- Historical, current, and anticipated future production levels of the global citrus (primarily orange) and guar crops,
- Weather related risks,
- Health and condition of citrus trees and guar plants (e.g., disease and pests), and
- International competition and pricing pressures resulting from natural and artificial pricing influences.

Governmental actions may restrict the future use of hazardous chemicals, including, but not limited to, the following industrial applications:

- O&G drilling and completion operations,
- O&G production operations, and
- Non-O&G industrial solvents.

TABLE A	2017	2016	2015	2017 vs. 2016 % Change	2016 vs. 2015 % Change
Average North American Active Drilling Rigs					
United States	876	509	978	72.1 %	(48.0)%
Canada	206	130	192	58.5 %	(32.3)%
Total	1,082	639	1,170	69.3 %	(45.4)%
Average U.S. Active Drilling Rigs by Type					
Vertical	70	60	139	16.7 %	(56.8)%
Horizontal	736	400	744	84.0 %	(46.2)%
Directional	70	49	95	42.9 %	(48.4)%
Total	876	509	978	72.1 %	(48.0)%
Average North American Drilling Rigs by Product					
Oil	812	471	835	72.4 %	(43.6)%
Natural Gas	270	168	335	60.7 %	(49.9)%
Total	1,082	639	1,170	69.3 %	(45.4)%

Source: Rig counts are per Baker Hughes (www.bakerhughes.com); Rig counts are the annual average of the reported weekly rig count activity.

Source: Rig counts are per Baker Hughes (www.bakerhughes.com); Rig counts are the annual average of the reported weekly rig count activity.
Completions are per the U.S. Energy Information Administration (https://www.eia.gov/petroleum/drilling/) as of January 16, 2018.

Average U.S. rig activity increased by 72.1% in 2017 compared to 2016, and decreased 48.0% from 2015 to 2016. According to data collected by the U.S. Energy Information Administration ("EIA") as reported on January 16, 2018, completions in the seven most prolific areas in the lower 48 states increased 39.9% in 2017 compared to 2016 and decreased 38.1% from 2015 to 2016.

Outlook for 2018

After a continuous decline in U.S. drilling rig activity beginning in mid-2014, the market began to gradually recover in the second quarter of 2016. Although a continuing recovery appears to be underway, the level of drilling and completion activity remains lower than previous levels experienced before the downturn in 2014. Assuming the price for crude oil remains relatively stable and regulatory impediments are limited, the Company expects U.S. oilfield activity to remain in a state of modest recovery.

During 2017, the Company continued to promote the efficacy of its Complex nano-Fluid® ("CnF®") chemistries. Although quarter to quarter performance may vary, the Company expects its Energy Chemistry Technologies sales to outperform market activity metrics over time by continuing to demonstrate the efficacy of its CnF® chemistries through comparative analysis of wells with and without CnF® chemistries, field validation results conducted by exploration and production ("E&P") companies, and the continuation of its direct-to-operator sales program known as the Flotek Store®. Whether operators purchase directly from Flotek or continue to purchase from oilfield distribution and service companies, E&P operators are benefiting from increased price transparency and a more direct relationship with Flotek's technical expertise and supply chain.

The Company continues to promote its patented and proprietary chemistries through its industry leading research and innovation staff who provide customer responsive product innovation, as well as development of new products which are expected to expand the Company's future product lines. During the third quarter of 2016, the Company completed its new Global Research & Innovation Center in Houston. This state-of-the-art facility permits the development of next-generation innovative energy chemistries, as well as expanded collaboration between clients, leaders from academia, and Company scientists. These collaborative opportunities are an important and distinguishing capability within the industry.

The outlook for the Company's consumer and industrial chemistries will be driven by the availability and demand for citrus oils, industrial solvents, and flavor and fragrance ingredients. Although current inventory and crop expectations are sufficient to meet the Company's needs to supply its flavor and fragrance business, as well as both internal and external industrial markets, the market supply of citrus oils has declined in recent years due to the reduction in citrus crops caused by the citrus greening disease, and further impacted by recent hurricane events. This reduced supply has resulted in higher citrus oil prices and increased price volatility. However, the Company expects its strong market position to enable it to maintain a stable supply of citrus oils for internal use and external sales. The Company expects to manage the impact of volatile terpene costs through the development of new product formulations and pricing strategies.

During the fourth quarter 2016, the Company implemented a strategic restructuring of its business to enable a greater focus on its core businesses in energy chemistry and consumer and industrial chemistry and initiated a process to identify potential buyers for its Drilling Technologies and Production Technologies segments. During 2017, the Company completed the sale or disposal of the assets and transfer or liquidation of liabilities and obligations of the Drilling Technologies and Production Technologies segments. The Company continues to focus on maximizing the profitability of its product and business portfolio, which may result in exiting or entering new product lines or businesses.
Capital expenditures for continuing operations totaled $9.0 million in 2017. The Company expects capital spending to be between $12 million and $16 million in 2018. The Company will remain nimble in its core capital expenditure plans, adjusting as market conditions warrant, and will focus its

capital spending program on positive returns on capital and/or pose strategic benefit for the long term.
Changes to geopolitical, global economic, and industry trends could have an impact, either positive or negative, on the Company’s business. In the event of significant adverse changes to the demand for oil and gas production, the market price for oil and gas, weather patterns, and/or the availability of citrus crops, the market conditions affecting the Company could change rapidly and materially. Should such adverse changes to market conditions occur, management believes the Company has access to adequate liquidity to withstand the impact of such changes while continuing to make strategic capital investments and acquisitions, if opportunities arise. In addition, management believes the Company is well-positioned to take advantage of significant increases in demand for its products should market conditions improve dramatically in the near term.

Results of Continuing Operations (in thousands):

	Year ended December 31,		
	2017	2016	2015
Revenue	$317,098	$262,832	$269,966
Cost of revenue (excluding depreciation and amortization)	215,129	170,255	172,033
Cost of revenue (excluding depreciation and amortization) %	67.8 %	64.8 %	63.7 %
Corporate general and administrative costs	41,492	43,745	38,623
Corporate general and administrative costs %	13.1 %	16.6 %	14.3 %
Segment selling and administrative costs	37,236	36,405	31,653
Segment selling and administrative costs %	11.7 %	13.9 %	11.7 %
Depreciation and amortization	12,159	10,429	8,735
Research and development costs	13,645	9,320	6,657
Loss (gain) on disposal of long-lived assets	292	(18)	(13)
(Loss) income from operations	(2,855)	(7,304)	12,278
Operating margin %	(0.9)%	(2.8)%	4.5 %
Gain on legal settlement	—	12,730	—
Interest and other expense, net	(1,356)	(2,282)	(1,644)
(Loss) income before income taxes	(4,211)	3,144	10,634
Income tax expense	(8,842)	(1,237)	(3,476)
(Loss) income from continuing operations	(13,053)	1,907	7,158
Loss from discontinued operations, net of tax	(14,342)	(51,037)	(20,620)
Net loss	$(27,395)	$(49,130)	$(13,462)

Results for 2017 compared to 2016—Consolidated
Consolidated revenue for the year ended December 31, 2017, increased $54.3 million, or 20.6%, from 2016. The increase in revenue was due to a 29.2% increase in Energy Chemistry Technologies revenue driven by the upturn in oilfield market activity. This was partially offset by a slight decrease in Consumer and Industrial Chemistry

Technologies revenue primarily related to decreased sales volumes.

Consolidated cost of revenue (excluding depreciation and amortization) for the year ended December 31, 2017, increased $44.9 million, or 26.4%, from 2016, and, as a percentage of revenue, increased to 67.8% for the year ended December 31, 2017, from 64.8% in 2016. These increases were primarily attributable to increased inventory, freight, and other direct costs associated with manufacturing in the Energy Chemistry Technologies segment and increased citrus oil prices in the Consumer and Industrial Chemistry Technologies segment.

Corporate general and administrative (“CG&A”) expenses are not directly attributable to products sold or services provided. CG&A costs decreased $2.3 million, or 5.2%, for the year ended December 31, 2017, from 2016. As a percentage of revenue, CG&A declined from 16.6% to 13.1% for the year ended December 31, 2017, compared to 2016. The decrease in CG&A costs was primarily due to lower legal expenses and stock compensation expense, partially offset by costs associated with executive retirement.

Segment selling and administrative (“SS&A”) expenses are not directly attributable to products sold or services provided. SS&A costs increased $0.8 million, or 2.3%, for the year ended December 31, 2017, from 2016. As a percentage of revenue, SS&A declined from 13.9% to 11.7% for the year ended December 31, 2017, compared to 2016. The increase in SS&A costs was primarily due to increased head count in the Energy Chemistry Technologies sales and support staff for new business lines.

Depreciation and amortization expense for the year ended December 31, 2017, increased by $1.7 million, or 16.6%, from 2016. This increase was primarily attributable to the completion and equipping of the Global Research & Innovation Center in August 2016, along with other improvements to manufacturing facilities.

Research and Innovation (“R&I”) expense for the year ended December 31, 2017, increased $4.3 million, or 46.4%, from 2016. The increase in R&I is primarily attributable to increased personnel for new product development and Flotek’s commitment to remaining responsive to customer needs, increased demand, continued growth and refining of existing product lines, and the development of new chemistries which are expected to expand the Company’s intellectual property portfolio.

Interest and other expense decreased $0.9 million for the year ended December 31, 2017, compared to 2016, primarily due to the repayment of the term loan in May 2017, as well as decreasing the outstanding balance of the revolving credit facility throughout 2017.

The Company recorded an income tax provision of $8.8 million, yielding an effective tax provision rate of 210.0%, for the year ended December 31, 2017, compared to an income tax provision of $1.2 million, yielding an effective tax rate of 39.3%, in 2016.

As part of the Company’s strategic restructuring of its business to enable a greater focus on its core businesses in energy chemistry and consumer and industrial chemistry, the Company completed the sale or disposal of the assets and transfer or liquidation of liabilities and obligations of the Drilling Technologies and Production Technologies segments during 2017. The Company recorded a net loss from

discontinued operations of $14.3 million for the year ended December 31, 2017.

Results for 2016 compared to 2015—Consolidated

Consolidated revenue for the year ended December 31, 2016, decreased $7.1 million, or 2.6%, from 2015. The decrease in revenue was due to an 11.9% decline in Energy Chemistry Technologies revenue driven by reduced oilfield market activity. This was partially offset by a 32.3% increase in Consumer and Industrial Chemistry Technologies revenue primarily related to increased citrus terpene prices.

Consolidated cost of revenue (excluding depreciation and amortization) for the year ended December 31, 2016, decreased $1.8 million, or 1.0%, from 2015, and, as a percentage of revenue, increased to 64.8% for the year ended December 31, 2016, from 63.7% in 2015. The increase as a percentage of revenue was primarily attributable to increased inventory cost and direct costs associated with manufacturing in the Consumer and Industrial Chemistry Technologies segment, partially offset by higher volumes of products sold in Energy Chemistry Technologies.

Corporate general and administrative (“CG&A”) expenses are not directly attributable to products sold or services provided. CG&A costs as a percentage of revenue rose from 14.3% to 16.6% for the year ended December 31, 2016, compared to 2015, as CG&A costs grew while revenues declined. CG&A costs increased $5.1 million, or 13.3%, for the year ended December 31, 2016, from 2015, primarily due to higher professional and legal fees.

Segment selling and administrative (“SS&A”) expenses are not directly attributable to products sold or services provided. SS&A costs as a percentage of revenue rose from 11.7% to 13.9% for the year ended December 31, 2016, compared to 2015, as SS&A costs grew while revenues declined. SS&A costs increased $4.8 million, or 15.0%, primarily due to increased head count in the Energy Chemistry Technologies sales and support staff for new business lines.

Depreciation and amortization expense for the year ended December 31, 2016, increased by $1.7 million, or 19.4%, from 2015. This increase was primarily attributable to the completion and equipping of the Global Research & Innovation Center in August 2016, along with other improvements to manufacturing facilities.

Research and Innovation ("R&I") expense for the year ended December 31, 2016, increased $2.7 million, or 40.0%, from 2015. The increase in R&I is primarily attributable to Flotek's commitment to remaining responsive to customer needs, increased demand, continued growth of our existing product lines, and the development of new chemistries which are expected to expand the Company's intellectual property portfolio.

In December 2016, the Company recognized a gain of $12.7 million from a legal settlement related to disgorgement of potential short-swing trading profits from a stockholder.

Interest and other expense increased $0.6 million for the year ended December 31, 2016, compared to 2015, primarily due to the interest rate increases on the term loan and revolving credit facility effective March 31, 2016, and September 30, 2016, associated with the credit facility amendments.
The Company recorded an income tax provision of $1.2 million, yielding an effective tax provision rate of 39.3%, for the year ended December 31, 2016, compared to an income tax provision of $3.5 million, yielding an effective tax provision rate of 32.7%, in 2015.

The Company implemented a strategic restructuring of its business to enable a greater focus on its core businesses in energy chemistry and consumer and industrial chemistry. The Company initiated a process to market for sale the Drilling Technologies and Production Technologies segments and has identified potential buyers. The Company completed the sale or disposal of the assets and transfer or liquidation of liabilities and obligations of the Drilling Technologies and Production Technologies segments during 2017. The Company recorded a net loss from discontinued operations of $51.0 million in 2016 for the classification of the Drilling Technologies and Production Technologies segments as held for sale.
Results by Segment

Energy Chemistry Technologies ("ECT")			
(dollars in thousands)	Year ended December 31,		
	2017	2016	2015
Revenue	$243,106	$188,233	$213,592
Income from operations	$33,611	$29,014	$43,902
Operating margin %	13.8 %	15.4 %	20.6 %

Results for 2017 compared to 2016—Energy Chemistry Technologies
ECT revenue for the year ended December 31, 2017, increased $54.9 million, or 29.2%, from 2016, compared to a 39.9% increase in completion activity as measured by the EIA. ECT performed along these market indicators by continuing to promote the benefits of its CnF® chemistries. Revenues increased with the increased customer demand resulting from improved oilfield market conditions.
Income from operations for the ECT segment increased $4.6 million, or 15.8%, for the year ended December 31, 2017, compared to 2016. This increase is primarily attributable to an increase in gross profit, increased activity associated with sales and marketing efforts in pursuit of growth opportunities, and cost reductions. The Company continues its commitment to research and innovation efforts within Energy Chemistry Technologies.

Results for 2016 compared to 2015—Energy Chemistry Technologies
ECT revenue for the year ended December 31, 2016, decreased $25.4 million, or 11.9%, from 2015, compared to a 45.4% decline in market activity as measured by average North American rig count. Flotek's ECT segment outperformed these market indicators by continuing to aggressively promote the benefits of its CnF® chemistries. Revenues declined due to reduced customer demand resulting from oilfield market conditions.
Income from operations for the Energy Chemistry Technologies segment decreased $14.9 million, or 33.9%, for the year ended December 31, 2016, compared to 2015. This decrease is primarily attributable to the decrease in revenue, increased costs associated with sales and marketing efforts in pursuit of growth opportunities, and increased costs associated with the Company's continued commitment to its research and innovation efforts within Energy Chemistry Technologies.

Consumer and Industrial Chemistry Technologies ("CICT")			
(dollars in thousands)	Year ended December 31,		
	2017	2016	2015
Revenue	$73,992	$74,599	$56,374

Income from operations	$7,465	$9,664	$8,742
Operating margin %	10.1 %	13.0 %	15.5 %

Results for 2017 compared to 2016—Consumer and Industrial Chemistry Technologies
CICT revenue for the year ended December 31, 2017, decreased $0.6 million, or 0.8%, from 2016, primarily due to a decline in sales volumes. The high price for citrus oils limited market activity and top line revenue. Citrus greening and adverse weather reduced citrus crops globally, thereby limiting the Company's performance in comparison to the growth experienced in 2016 and 2015.
Income from operations for the CICT segment decreased $2.2 million, or 22.8%, for the year ended December 31, 2017, from 2016, primarily due to higher raw material costs and increased headcount to facilitate growth in the food and beverages market through new research activities and the opening of a sales office in Japan.

Results for 2016 compared to 2015—Consumer and Industrial Chemistry Technologies
CICT revenue for the year ended December 31, 2016, increased $18.2 million, or 32.3%, from 2015. This increase is due to higher terpene prices associated with limited availability of citrus oils globally and volume increases in the Flavor and Fragrance product line.
Income from operations for the CICT segment increased $0.9 million, or 10.5%, for the year ended December 31, 2016, from 2015, primarily due to increased sales, partially offset by increased raw material cost and higher operating expenses associated with growth in the segment's Flavor activities.

Discontinued Operations
During the fourth quarter of 2016, the Company classified the Drilling Technologies and Production Technologies segments as held for sale based on management's intention to sell these businesses. During 2017, the Company completed the sale or disposal of the assets and transfer or liquidation of liabilities

and obligations of the Drilling Technologies and Production Technologies segments. The Company's historical financial statements have been revised to present the operating results of the Drilling Technologies and Production Technologies segments as discontinued operations.

Drilling Technologies

(dollars in thousands)	Year ended December 31,		
	2017	2016	2015
Revenue	$11,534	$27,627	$52,112
Loss from operations	$(2,646)	$(44,522)	$(27,340)
Loss from operations - excluding impairment	$(2,646)	$(8,000)	$(7,772)
Operating margin % - excluding impairment	(22.9)%	(29.0)%	(14.9)%

Results for 2017 compared to 2016—Drilling Technologies
On May 22, 2017, the Company completed the sale of substantially all of the assets and transfer of certain specified liabilities and obligations of the Company's Drilling Technologies segment to National Oilwell Varco, L.P. ("NOV") for $17.0 million in cash consideration.
On August 16, 2017, the Company completed the sale of substantially all of the remaining assets of the Company's Drilling Technologies segment to Galleon Mining Tools, Inc. for $1.0 million in cash consideration and a note receivable of $1.0 million due in one year.
Upon completion of these sales, the Company ceased all operations for the Drilling Technologies segment.

Results for 2016 compared to 2015—Drilling Technologies
Drilling Technologies revenue for the year ended December 31, 2016, decreased $24.5 million, or 47.0%, from 2015. The revenue decline was primarily related to the decrease in drilling rig activity and significant pricing pressure during the year. Revenue improved 5.6% for the quarter ended December 31, 2016, compared to the quarter ended September 30, 2016, as market conditions continue to improve.

During the first quarter of 2016, as a result of the sequential decline in segment revenue and expectations for future drilling activity, the Company determined the carrying amount of certain long-lived assets exceeded their respective fair values and that some inventory was either not usable in future operations or the carrying amount exceeded its market value.

As a result, an impairment charge of $36.5 million was recorded to reflect the reduced value of inventory and long-lived assets in the Drilling Technologies segment.

Drilling Technologies loss from operations for the year ended December 31, 2016, increased by $17.2 million from 2015, primarily resulting from first quarter 2016 impairment charges. Loss from operations, excluding the impairment, for

the year ended December 31, 2016, increased by $0.2 million from 2015, primarily due to reductions in revenue and pricing pressure that resulted in customer price concessions. These volume decreases were offset by a 27.5% reduction in sales and administrative cost reductions throughout the year, including employee related expenses and reduced travel costs.

Production Technologies			
(dollars in thousands)	Year ended December 31,		
	2017	2016	2015
Revenue	$4,002	$8,292	$12,281
Loss from operations	$(1,357)	$(8,814)	$(4,111)
Loss from operations - excluding impairment	$(1,357)	$(4,901)	$(3,307)
Operating margin % - excluding impairment	(33.9)%	(59.1)%	(26.9)%

Results for 2017 compared to 2016—Production Technologies

On May 23, 2017, the Company completed the sale of substantially all of the assets and transfer of certain specified liabilities and obligations of the Company's Production Technologies segment to Raptor Lift Solutions, LLC ("Raptor Lift") for $2.9 million in cash consideration.

Upon completion of this sale, the Company ceased all operations for the Production Technologies segment.

Results for 2016 compared to 2015—Production Technologies

Revenue for the Production Technologies segment for the year ended December 31, 2016, decreased by $4.0 million, or 32.5%, from 2015, primarily due to decreased sales of rod pump equipment and older technology ESP equipment.

Sequentially, revenue increased by 5.3% in the fourth quarter 2016, compared to third quarter 2016.

As a result of the introduction of newer and proprietary technology, as well as lower demand for older technologies, the Company evaluated its Production Technologies inventory for impairment leading to the recording of an impairment charge of $3.9 million for inventory in the first quarter of 2016.

Loss from operations increased by $4.7 million for the year ended December 31, 2016, from 2015. Loss from operations, excluding the impairment, increased by $1.6 million for the year ended December 31, 2016, from 2015. These increased losses are primarily due to lower revenue volume and lower margins due to pricing pressure. SG&A costs have decreased by 8.8% year over year due to reduced employment costs and decreased travel costs, partially offsetting the impact of the decreased revenue.

Capital Resources and Liquidity

Overview

The Company's ongoing capital requirements arise from the Company's need to service debt, acquire and maintain equipment, fund working capital requirements, and when the opportunities arise, to make strategic acquisitions and repurchase Company stock. During 2017, the Company funded capital requirements primarily with cash on hand and debt financing.

The Company's primary source of debt financing is its $75 million Credit Facility with PNC Bank. This Credit Facility contains provisions for a revolving credit facility secured by substantially all of the Company's domestic real and personal property, including accounts receivable, inventory, land, buildings, equipment, and other intangible assets.

As of December 31, 2017, the Company had $28.0 million in outstanding borrowings under the revolving debt portion of the Credit Facility. At December 31, 2017, the Company was in compliance with all debt covenants. Significant terms of the Credit Facility are discussed in Note 12 – "Long-Term Debt and Credit Facility" in Part II, Item 8 – "Financial Statements and Supplementary Data" of this Annual Report.

At December 31, 2017, the Company remained compliant with the continued listing standards of the NYSE.

Cash and cash equivalents totaled $4.6 million at December 31, 2017. The Company generated $17.1 million of cash inflows from continuing operations (net of $3.8 million expended in working capital). Offsetting these cash inflows, the Company used $9.0 million for capital expenditures, $20.4 million for repayments of debt, net of borrowings, $5.2 million for the repurchase of common stock, and $1.7 million for purchases of treasury stock for tax withholding purposes related to the vesting of restricted stock awards and the exercise of non-qualified stock options.

Liquidity

The Company plans to spend between $12 million and $16 million for committed and planned capital expenditures in 2018. During 2018, the Company plans to use internally

generated funds and, if necessary, borrowings under the revolving line of credit to fund operations and capital expenditures. Any excess cash generated may be used to pay down the level of debt or be retained for future use. The Company will continue to invest capital into what it believes to be attractive economic returning opportunities for its shareholders. This includes the potential for share repurchases as approved by the Board of Directors in June 2015.

Net Debt

Net debt represents total debt less cash and cash equivalents and combines the Company’s indebtedness and the cash and cash equivalents that could be used to repay that debt. Components of net debt are as follows (in thousands):

	December 31, 2017	December 31, 2016
Cash and cash equivalents	$ 4,584	$ 4,823
Current portion of long-term debt	(27,950)	(40,566)
Long-term debt, less current portion	—	(7,833)
Net debt	$ (23,366)	$ (43,576)

Cash Flows

Cash flow metrics from the consolidated statements of cash flows are as follows (in thousands):

	Year ended December 31, 2017	2016	2015
Net cash provided by operating activities	$17,131	$2,054	$25,472
Net cash provided by (used in) investing activities	9,740	(22,281)	(17,005)
Net cash (used in) provided by financing activities	(27,285)	22,851	(7,349)
Net cash flows provided by (used in) discontinued operations	24	(6)	—
Effect of changes in exchange rates on cash and cash equivalents	151	(3)	(176)
Net (decrease) increase in cash and cash equivalents	$(239)	$2,615	$942

Operating Activities

During 2017, 2016, and 2015, cash from operating activities totaled $17.1 million, $2.1 million, and $25.5 million, respectively. Consolidated net loss for 2017 totaled $13.1 million, compared to consolidated net income of $1.9 million and $7.2 million for 2016 and 2015, respectively.

Net non-cash contributions to net income in 2017, totaled $26.4 million. Contributory non-cash items consisted primarily of $12.6 million for depreciation and amortization expense, $11.2 million for stock compensation expense, $2.0 million for reduction in incremental tax benefit related to share-based awards, $0.2 million for changes to deferred income taxes, and $0.1 million for provisions related to accounts receivables.

Net non-cash contributions to net income in 2016, totaled $6.3 million. Contributory non-cash items consisted primarily of

$10.9 million for depreciation and amortization expense, $12.1 million for stock compensation expense, $2.5 million for reduction in incremental tax benefit related to share-based awards, and $0.6 million for provisions related to accounts receivables, partially offset by $19.7 million for changes to deferred income taxes.

Net non-cash contributions to net income in 2015, totaled $13.3 million. Contributory non-cash items consisted primarily of $9.1 million for depreciation and amortization expense, $13.1 million for stock compensation expense, and $0.4 million for provisions related to accounts receivables, partially offset by $7.9 million for changes to deferred

income taxes and $1.3 million for excess tax benefit related to share-based awards.
During 2017, changes in working capital provided $3.8 million in cash, primarily resulting from decreasing accounts receivables, income taxes receivable, and other current assets

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by $21.6 million and increasing accrued liabilities and interest payable by $8.2 million, partially offset by increasing inventories by $17.3 million and decreasing accounts payable by $8.7 million.

During 2016, changes in working capital used $6.1 million in cash, primarily resulting from increasing accounts receivables, inventories, income taxes receivable, and other current assets by $40.8 million and decreasing income taxes payable by $2.0 million, partially offset by increasing accounts payable and accrued liabilities by $36.6 million.

During 2015, changes in working capital provided $5.0 million in cash, primarily resulting from decreasing accounts receivable and other current assets by $13.8 million and increasing accrued liabilities, income taxes payable, and interest payable by $13.4 million, partially offset by increasing inventories and income taxes receivable by $14.6 million and decreasing accounts payable by $7.7 million.

Investing Activities

Net cash provided by investing activities was $9.7 million during 2017. Cash provided by investing activities primarily included $18.5 million of proceeds received from the sale of the Drilling Technologies and Production Technologies segments and $0.7 million of proceeds received from the sale of fixed assets, partially offset by $9.0 million for capital expenditures and $0.5 million for the purchase of various patents and other intangible assets.

Net cash used in investing activities was $22.3 million during 2016. Cash used in investing activities primarily included $14.0 million for capital expenditures, $7.9 million associated with the purchase of 100% of the stock and interests of IPI, and $0.6 million for the purchase of patents and intangible assets.

Net cash used in investing activities was $17.0 million during 2015. Cash used in investing activities primarily included $16.4 million for capital expenditures and $0.6 million for the purchase of patents and intangible assets.

Financing Activities

Net cash used in financing activities was $27.3 million during 2017, primarily due to using $20.4 million for repayments of debt, net of borrowings, $5.2 million for the repurchase of common stock, $1.7 million for purchases of treasury stock for tax withholding purposes related to the vesting of restricted stock awards and the exercise of non-qualified stock options, and $0.6 million for payments of debt issuance costs. Cash used in financing activities was partially offset by receiving $0.7 million in proceeds from the sale of common stock.

During 2016, net cash generated through financing activities was $22.9 million. Cash generated through financing activities

was primarily due to receiving $30.9 million in proceeds from the sale of common stock, inclusive of $30.1 million, net of issuance costs, from the private placement of 2.5 million common shares on July 27, 2016. Cash generated through financing activities was partially offset by using $2.1 million for repayments of debt, net of borrowings, reductions in tax benefit related to stock-based compensation of $2.5 million, purchases of treasury stock for tax withholding purposes related to the vesting of restricted stock awards and the exercise of non-qualified stock options of $2.4 million, and payments of debt issuance costs of $1.2 million.

During 2015, net cash used in financing activities was $7.3 million. Cash used in financing activities was primarily due to $6.3 million for purchases of treasury stock for tax withholding purposes related to the vesting of restricted stock awards and the exercise of non-qualified stock options, and $9.7 million for the repurchase of common stock. Cash used in financing activities was partially offset by receiving $6.5 million for borrowings of debt, net of repayments, proceeds from the excess tax benefit related to stock-based compensation of $1.3 million, and proceeds from the sale of common stock of $0.9 million.

Off-Balance Sheet Arrangements

There have been no transactions that generate relationships with unconsolidated entities or financial partnerships, such as entities often referred to as “structured finance” or “special purpose entities” (“SPEs”), established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As of December 31, 2017, the Company was not involved in any unconsolidated SPEs.

The Company has not made any guarantees to customers or vendors nor does the Company have any off-balance sheet arrangements or commitments that have, or are reasonably likely to have, a current or future effect on the Company’s financial condition, change in financial condition, revenue, expenses, results of operations, liquidity, capital expenditures, or capital resources that are material to investors.

Contractual Obligations

Cash flows from operations are dependent on a variety of factors, including fluctuations in operating results, accounts receivable collections, inventory management, and the timing of payments for goods and services. Correspondingly, the impact of contractual obligations on the Company's liquidity and capital resources in future periods is analyzed in conjunction with such factors.

Material contractual obligations consist of repayment of amounts borrowed under the Company's Credit Facility and payment of operating lease obligations.

Contractual obligations at December 31, 2017 are as follows (in thousands):

	Payments Due by Period				
	Total	Less than 1 year	1 - 3 years	3 -5 years	More than 5 years
Borrowings under revolving credit facility [(1)]	$27,950	$27,950	$ —	$ —	$ —
Operating lease obligations	21,806	2,734	4,603	3,961	10,508
Total	$49,756	$30,684	$ 4,603	$ 3,961	$ 10,508

(1) The borrowing is classified as current debt. The weighted-average interest rate was 4.48% at December 31, 2017.

Critical Accounting Policies and Estimates

The Company's consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). Preparation of these statements requires management to make judgments, estimates and assumptions that affect the amounts of assets and liabilities in the financial statements and revenue and expenses during the reporting period. Significant accounting policies are described in Note 2 – "Summary of Significant Accounting Policies" in Part II, Item 8 – "Financial Statements and Supplementary Data" of this Annual Report. The Company believes the following accounting policies are critical due to the significant, subjective, and complex judgments and estimates required when preparing the consolidated financial statements. The Company regularly reviews judgments, assumptions, and estimates to the critical accounting policies.

Basis of Presentation

During the fourth quarter of 2016, the Company classified the Drilling Technologies and Production Technologies reportable segments' operations as held for sale based on management's intention to sell these businesses. The operating results of these segments have been reported as discontinued operations in the consolidated financial statements. Amounts previously reported have been reclassified to conform to this presentation to allow for meaningful comparison of continuing operations.

Revenue Recognition

Revenue for product sales and services is recognized when all of the following criteria have been met: (a) persuasive evidence of an arrangement exists, (b) products are shipped or services rendered to the customer and all significant risks and rewards of ownership have passed to the customer, (c) the price to the customer is fixed and determinable, and (d) collectability is reasonably assured. The Company's products and services are sold based on a purchase order and/or contract and have fixed or determinable prices. There is typically no right of return or any significant post-delivery obligations. Probability of collection is assessed on a customer-by-customer basis.

Revenue and associated accounts receivable in the Energy Chemistry Technologies and Consumer and Industrial Chemistry Technologies segments are recorded at the agreed price when the aforementioned conditions are met. Generally, a signed proof of obligation is obtained from the customer (delivery ticket or field bill for usage). Deposits and other funds received in advance of delivery are deferred until the transfer of ownership is complete.

For certain contracts related to the EOGA division and the Logistics division of the Energy Chemistry Technologies segment, the Company recognizes revenue under the percentage-of-completion method of accounting, measured by the percentage of costs incurred to date proportionate to the total estimated costs of completion. This calculated percentage is applied to the total estimated revenue at completion to calculate revenue earned to date. Contract costs include all direct labor and material costs, as well as indirect costs related to manufacturing and construction operations. General and administrative costs are charged to expense as incurred. Changes in job performance metrics and estimated profitability, including those arising from contract bonus and penalty provisions and final contract settlements, may periodically result in revisions to revenue and expenses and are recognized in the period in which such revisions become probable. Known or anticipated losses on contracts are recognized when such amounts become probable and estimable.

Sales tax collected from customers is not included in revenue but rather is accrued as a liability for future remittance to the respective taxing authorities.

Allowance for Doubtful Accounts

The Company performs ongoing credit evaluations of customers and grants credit based upon historical payment history, financial condition, and industry expectations, as available. Determination of the collectability of amounts due from customers requires the Company to use estimates and make judgments regarding future events and trends, including monitoring customers' payment history and current credit worthiness, in order to determine that collectability is reasonably assured. The Company also considers the overall business climate in which its customers operate.

These uncertainties require the Company to make frequent judgments and estimates regarding a customers' ability to pay amounts due in order to assess and quantify an appropriate allowance for doubtful accounts. The primary factors used to quantify the allowance are customer delinquency, bankruptcy, and the Company's estimate of its ability to collect outstanding receivables based on the number of days a receivable has been outstanding.

The majority of the Company's customers operate in the energy industry. The cyclical nature of the industry may affect customers' operating performance and cash flows, which could impact the Company's ability to collect on these obligations. Additionally, some customers are located in international areas that are inherently subject to risks of economic, political, and civil instability.

The Company continues to monitor the economic climate in which its customers operate and the aging of its accounts receivable. The allowance for doubtful accounts is based on the aging of accounts and an individual assessment of each invoice. At December 31, 2017, the allowance was 1.6% of gross accounts receivable, compared to an allowance of 1.4% a year earlier. While credit losses have historically been within expectations and the provisions established, should actual write-offs differ from estimates, revisions to the allowance would be required.

Inventory Reserves

Inventories consist of raw materials, work-in-process, and finished goods and are stated at the lower of cost or market, using the weighted-average cost method. Finished goods inventories include raw materials, direct labor, and production overhead. The Company's inventory reserve represents the excess of the inventory carrying amount over the amount expected to be realized from the ultimate sale or other disposal of the inventory.

The Company regularly reviews inventory quantities on hand and records provisions or impairments for excess or obsolete inventory based on the Company's forecast of product demand, historical usage of inventory on hand, market conditions, production and procurement requirements, and technological developments. Significant or unanticipated changes in market conditions or Company forecasts could affect the amount and timing of provisions for excess and obsolete inventory and inventory impairments.

Significant changes have not been made in the methodology used to estimate the reserve for excess and obsolete inventory or impairments during the past three years. Specific assumptions are updated at the date of each evaluation to consider Company experience and current industry trends. Significant judgment is required to predict the potential impact which the current business climate and evolving market conditions could have on the Company's assumptions. Changes which may occur in the energy industry are hard to predict, and they may occur rapidly. To the extent that changes in market conditions result in adjustments to management

assumptions, impairment losses could be realized in future periods.

At December 31, 2017 and 2016, the Company recorded an impairment for all inventory items identified as excess and obsolete inventory.

Business Combinations

The Company allocates the fair value of purchase consideration to the assets acquired, liabilities assumed, and any non-controlling interests in the acquired entity generally based on their fair values at the acquisition date. The excess of the fair value of purchase consideration over the fair value of these assets acquired, liabilities assumed, and any non-controlling interests in the acquired entity is recorded as goodwill. The primary items that generate goodwill include the value of the synergies between the acquired company and Flotek and the value of the acquired assembled workforce. Acquisition-related expenses are recognized separately from the business acquisition and are recognized as expenses as incurred.

The purchase price allocation process requires management to make significant estimates and assumptions at the acquisition date with respect to the fair value of:

- intangible assets acquired from the acquiree;
- tax assets and liabilities assumed from the acquiree;
- stock awards assumed from the acquiree that are included in the purchase price; and
- pre-acquisition obligations and contingencies assumed from the acquiree.

Although the Company believes the assumptions and estimates it has made in the past have been reasonable and appropriate, they are based in part on historical experience and information obtained from the management of the

acquired companies and are inherently uncertain.
Goodwill
Goodwill is not subject to amortization, but is tested for impairment annually during the fourth quarter, or more frequently if an event occurs or circumstances change that would indicate a potential impairment. These circumstances may include, but are not limited to, a significant adverse change in the business climate, unanticipated competition, or a change in projected operations or results of a reporting unit. Goodwill is tested for impairment at a reporting unit level. At December 31, 2017, two reporting units have a goodwill balance: Energy Chemistry Technologies and Consumer and Industrial Chemistry Technologies.
During the annual testing, the Company assesses whether a goodwill impairment exists using both qualitative and quantitative assessments. The qualitative assessment involves determining whether events or circumstances exist that indicate it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. If, based on this qualitative assessment, it is

determined that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, the Company does not perform a quantitative assessment.

If the qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit is less than its carrying amount or if the Company elects not to perform a qualitative assessment, a quantitative impairment test is performed to determine whether goodwill impairment exists at the reporting unit.

Effective during the fourth quarter of 2017, the Company adopted Accounting Standards Update ("ASU") 2017-04, "Simplifying the Test for Goodwill Impairment," which eliminated the second step of the two-step quantitative impairment test. Now, if quantitative impairment testing is performed, the Company compares the estimated fair value of each reporting unit which has goodwill to its carrying amount, including goodwill. To determine fair value estimates, the Company uses the income approach based on discounted cash flow analyses, combined, when appropriate, with a market-based approach. The market-based approach considers valuation comparisons of recent public sale transactions of similar businesses and earnings multiples of publicly traded businesses operating in industries consistent with the reporting unit. If the carrying amount of a reporting unit, including goodwill, exceeds its fair value, an impairment loss is recognized in an amount equal to that excess, limited to the amount of goodwill allocated to that reporting unit.

Prior to adoption of ASU 2017-04, if quantitative impairment testing was performed, the Company used a two-step quantitative impairment test to determine whether goodwill impairment exists at the reporting unit. The first step was to compare the estimated fair value of each reporting unit which has goodwill to its carrying amount, including goodwill. To determine fair value estimates, the Company used the income approach based on discounted cash flow analyses, combined, when appropriate, with a market-based approach. The market-based approach considers valuation comparisons of recent public sale transactions of similar businesses and earnings multiples of publicly traded businesses operating in industries consistent with the reporting unit. If the fair value of a reporting unit was less than its carrying amount, the second step of the impairment test was performed to determine the amount of impairment, if any. The second step compares the implied fair value of the reporting unit goodwill with the carrying amount of the goodwill. If the carrying amount of the reporting unit's goodwill exceeded its implied value, an impairment loss was recognized in an amount equal to that excess.

The Company determines fair value using widely accepted valuation techniques, including discounted cash flows and market multiples analyses, and through use of independent fixed asset valuation firms, as appropriate. These types of analyses contain uncertainties, as they require management to make assumptions and to apply judgments regarding industry economic factors and the profitability of future business strategies. The Company's policy is to conduct impairment testing based on current business strategies, taking into

consideration current industry and economic conditions as well as the Company's future expectations. Key assumptions used in the discounted cash flow valuation model include, among others, discount rates, growth rates, cash flow projections, and terminal value rates. Discount rates and cash flow projections are the most sensitive and susceptible to change as they require significant management judgment. Discount rates are determined using a weighted average cost of capital ("WACC"). The WACC considers market and industry data, as well as Company-specific risk factors for each reporting unit in determining the appropriate discount rate to be used. The discount rate utilized for each reporting unit is indicative of the return an investor would expect to receive for investing in a similar business. Management uses industry considerations and Company-specific historical and projected results to develop cash flow projections for each reporting unit. Additionally, if appropriate, as part of the market-based approach, the Company utilizes market data from publicly traded entities whose businesses operate in industries comparable to the Company's reporting units, adjusted for certain factors that increase comparability.

During annual goodwill impairment testing in 2017, the Company first assessed qualitative factors to determine whether it was necessary to perform the quantitative impairment test. During annual goodwill impairment testing in 2016 and 2015, the Company first assessed qualitative factors to determine whether it was necessary to perform the two-step goodwill impairment test.

As of the fourth quarter of 2017, the Company was not able to conclude that it was not more likely than not that the estimated fair value of the Energy Chemistry Technologies ("ECT") and Consumer and Industrial Chemistry Technologies ("CICT") reporting units exceeded the carrying amount of the respective reporting units. Therefore, the

Company performed a quantitative impairment test for each of these reporting units. The results of the impairment test indicated that the estimated fair values of the two reporting units exceeded the carrying amount of their respective reporting units by approximately $34.7 million and $20.2 million, respectively, or an excess of 21% and 23%, respectively, over the carrying amount. Therefore, no impairment was deemed necessary for 2017. To evaluate the sensitivity of the fair value calculations of the ECT and CICT reporting units, the company applied a hypothetical 10% unfavorable change in the weighted average cost of capital, which would have reduced the estimated fair value of the ECT and CICT reporting units by approximately $23.7 million and $12.4 million, respectively. These sensitivity analyses were not indicative of an impairment for the ECT and CICT reporting units.

Key assumptions and estimates were based on experience of the Company’s management, experience with past recessions within the oil and gas industry (specifically the 2008/2009 recession), and internal as well as published external perspectives of recovery timing. Key assumptions used in the discounted cash flow analysis included:

- Revenue and expenses grow 2% annually;
- Margins stay in the lower portion of historical ranges;
- Working capital ratios remain consistent with historical levels;
- Risk premium related to foreign country security, government stability, and potential future foreign currency.

Based on the Company’s fourth quarter 2017 testing of goodwill for impairment at each reporting unit, no impairments were recorded.

As of the fourth quarter of 2016, the Company concluded it was not more likely than not that there was an impairment of goodwill for the Consumer and Industrial Chemistry Technologies or Energy Chemistry Technologies reporting units based on the assessment of qualitative factors. The Consumer and Industrial Chemistry Technologies reporting unit has outpaced prior years revenues and maintained strong margins. The Energy Chemistry Technologies reporting unit saw revenue improve throughout 2017 and reduced by 12% versus 2015 as market activity fell 43% from 2015 to 2016. However, the segment continued to produce strong margins.

The Company was not able to conclude that it was not more likely than not that the estimated fair value of the Teledrift and Production Technologies reporting units exceeded the carrying amount of the respective reporting units, as of the fourth quarter of 2016. Therefore, the Company performed a Step 1 impairment test for each of these reporting units. The results of the Step 1 test indicated that the estimated fair values of the two reporting units exceeded the carrying amount of their respective reporting units by approximately $13.2 million and $6.7 million respectively, or an excess of 34% and 44%, respectively, over the carrying amount. Therefore, no further testing was required for these two reporting units. To evaluate the sensitivity of the fair value calculations of the Teledrift and Production Technologies reporting units, the Company applied a hypothetical 10% unfavorable change in the weighted average cost of capital, which would have reduced the estimated fair value of the Teledrift and Production Technologies reporting units by approximately $5.3 million and $4.2 million, respectively. These sensitivity analyses were not indicative of an impairment for the Teledrift or Production Technologies reporting units.

As of the third quarter of 2016, the Company concluded it was not more likely than not that there was an impairment of goodwill for the Consumer and Industrial Chemistry Technologies reporting unit, the Energy Chemistry Technologies reporting unit, and the Teledrift reporting unit based on the assessment of qualitative factors. The Consumer and Industrial Chemistry Technologies reporting unit has seen increased revenues in 2016 compared to 2015 and has maintained margins in the range seen from 2014 through 2015. The Energy Chemistry Technologies reporting unit had an 11% decrease in revenue versus the 27% decline in market activity for the first quarter of 2016 compared to the fourth quarter of 2015, a 3% decrease in revenue versus the 35%

decline in market activity for the second quarter of 2016 compared to the first quarter of 2016, and a 4% increase in revenue versus the 28% increase in market activity for the third quarter of 2016 compared to the second quarter of 2016, but continues to maintain gross margins. The Teledrift reporting unit, having passed the Step 1 impairment tests in the previous two quarters, had the highest revenue quarter for 2016 and improved margins. Teledrift revenue for the third quarter of 2016 increased 37% versus the second quarter of 2016 and improved gross margins by 8.4%.

For the first quarter of 2016, the Company was not able to conclude that it was not more likely than not that the estimated fair value of the Production Technologies and Teledrift reporting units exceeded the carrying amount of the respective reporting units. Therefore, the Company performed a Step 1 impairment test for each of these reporting units. The results of the Step 1 test indicated that the estimated fair values of the Production Technologies and the Teledrift reporting units exceeded the carrying amount of their respective reporting units by approximately $34.9 million and $2.1 million, respectively, or an excess of 153% and 5%, respectively, over the carrying amount. Therefore, no further testing was required for these two reporting units.

Again, for the second quarter of 2016, the Company was not able to conclude that it was not more likely than not that the estimated fair value of the Production Technologies and Teledrift reporting units exceeded the carrying amount of the respective reporting units. Therefore, the Company performed a Step 1 impairment test for each of these reporting units. The results of the Step 1 test indicated that the estimated fair values of the Production Technologies and the Teledrift reporting units exceeded the carrying amount of their respective reporting units by approximately $17.1 million and $2.2 million, respectively, or an excess of 77% and 6%, respectively, over the carrying amount. Therefore, no further testing was required for these two reporting units.

Once again, for the third quarter of 2016, the Company was not able to conclude that it was not more likely than not that the estimated fair value of the Production Technologies reporting unit exceeded the carrying amount of the reporting unit. Therefore, the Company performed a Step 1 impairment test for this reporting unit. The results of the Step 1 test indicated that the estimated fair value of the Production Technologies reporting unit exceeded the carrying amount of the reporting unit by approximately $8.1 million, or an excess of 36.9% over the carrying amount. Therefore, no further testing was required for this reporting unit.

Key assumptions and estimates were based on experience of the Company's management, experience with past recessions within the oil and gas industry (specifically the 2008/2009 recession), and internal as well as published external perspectives of recovery timing. Key assumptions used in the discounted cash flow analysis included:

- U.S. rig count bottoms during 2016 and begins to recover to average 532 rigs for the last two quarters of

2016. Average Rig count climbs to 725 in 2017, 880 in 2018, and 920 in 2019, and grows by 50 rigs annually for 2020 through 2023, and then holds flat through 2026;

- International revenue grows 3% annually;
- Domestic rental revenue per rig and total domestic revenue per rig dip to lows seen during the 2008/2009 downturn through 2017 and then slowly return to the lower end of the ranges seen between 2012 and 2014;
- International indirect expenses remain 3.5% of total international revenue;
- Domestic indirect expense percentages slowly return to historical levels;
- Margins stay in the lower portion of historical ranges;
- Working capital ratios remain consistent; and
- Risk premium related to foreign country security and government stability.

Some of the factors that affected the change in results of the Step 1 impairment test from the fourth quarter of 2015 to the fourth quarter of 2016 included:

- Impairment testing of long-lived assets excluding goodwill resulted in a reduction to the balance sheet of $14.3 million for the Teledrift reporting unit in the first quarter of 2016.
- Impairment of inventory resulted in a reduction to the balance sheet of $1.3 million for the Teledrift reporting unit and $3.9 million for the Production Technologies reporting unit in the first quarter of 2016.
- Cost reduction initiatives during the first half of 2016 reduced direct and indirect expenses for the Drilling Technologies segment.
- Due to the surplus of rental tools and the low levels of drilling rig activity, capital expenditures for new rental tools will be minimal through 2019 in the Teledrift reporting unit.

Based on the Company’s fourth quarter 2016 testing of goodwill for impairment at each reporting unit, no impairments were recorded.

The business of the Drilling Technologies segment is closely aligned with the drilling rig count and the U.S. drilling rig count declined approximately 55% during the first and second quarters of 2015. Revenue of the Drilling Technologies segment declined over 30% compared to the fourth quarter of 2014, although the segment’s gross margin was rising moderately. The drop off in business resulting from declines in oil prices and the active drilling rig count was an event or circumstance that caused the Company to test its recorded goodwill in the Teledrift reporting unit within the Drilling Technologies segment (deterioration in the operating environment and overall financial performance of the reporting unit) during the second quarter of 2015. In addition, the Company took a look at its business to ascertain whether there were operating changes that needed to be made.

Impairment of goodwill was not tested for other reporting units during the second quarter of 2015 as revenue and margins in the Energy Chemistry Technologies and the Consumer and Industrial Chemistry Technologies reporting units had been increasing. Goodwill of $1.7 million in the Production Technologies reporting unit resulted from a 2015 acquisition which provided an avenue for new products and additional revenue.

Goodwill of $15.3 million in the Teledrift reporting unit was tested for impairment during the second quarter of 2015. The primary technique utilized to estimate the fair value of the Teledrift reporting unit was a discounted cash flow analysis. Discounted cash flow analysis requires the Company to make various judgments, estimates and assumptions about future revenue, margins, growth rates, capital expenditures, working capital and discount rates. The first step in the impairment testing process compared the estimated fair value of the reporting unit to its carrying amount, including goodwill. The analysis indicated a fair value in excess of the carrying amount by approximately 97% for the Teledrift reporting unit. Because the fair value of the reporting unit exceeded its carrying amount, the second step of the goodwill impairment test was not necessary.

As of the fourth quarter of 2015, the Company concluded it was not more likely than not that there was an impairment of goodwill for the Consumer and Industrial Chemistry Technologies reporting unit based on the assessment of qualitative factors. The Consumer and Industrial Chemistry Technologies reporting unit has seen increased revenues in 2015 compared to 2014 and has maintained gross margins.

However, the Company was not able to conclude that it was not more likely than not that the estimated fair value of the Energy Chemistry Technologies, Teledrift, and Production Technologies reporting units exceeded the carrying amount of the respective reporting units. Therefore, the Company performed a Step 1 impairment test for each of these reporting units. The results of the Step 1 test indicated that the estimated fair values of the Energy Chemistry Technologies and Production Technologies reporting units exceeded the carrying amount of their respective reporting units by approximately $217.3 million and $35.8 million respectively, or an excess of 156% and 141%, respectively, over the carrying amount. Therefore, no further testing was required for these two reporting units. To evaluate the sensitivity of the fair value calculations of the Energy Chemistry Technologies and Production Technologies reporting units, the Company applied a hypothetical 10% unfavorable change in the weighted average cost of capital, which would have reduced the estimated fair value of the Energy Chemistry Technologies and Production Technologies reporting units by approximately $44.0 million and $8.6 million, respectively. These sensitivity analyses were not indicative of an impairment for the Energy Chemistry Technologies or Production Technologies reporting units.

The Step 1 impairment test for the Teledrift reporting unit indicated that the estimated fair value of the reporting unit was less than the carrying amount by approximately $1.4 million; therefore, the Company performed a Step 2 impairment test with the assistance of a third party valuation firm. The results of the Step 2 impairment test indicated that the implied fair value of goodwill exceeded the carrying amount of the goodwill for the Teledrift reporting unit by approximately $2.0 million, or an excess of 15% over the carrying amount. To evaluate the sensitivity of the fair value calculation for the Teledrift reporting unit, the Company applied a hypothetical 10% unfavorable change in the weighted average cost of capital, which would have reduced the estimated fair value of goodwill by approximately $0.7 million which was not indicative of an impairment of goodwill.

Key assumptions and estimates were based on experience of the Company’s management, experience with past recessions within the oil and gas industry (specifically the 2008/2009 recession), and internal as well as published external perspectives of recovery timing. Key assumptions used in the discounted cash flow analysis included:

- US rig count bottoms at year end around 700 rigs in 2015 to average 983 rigs for 2015. Rig count climbs to 875 in 2016, continues to 1,000 rigs in 2017 and grows 5% annually for 2018 through 2020, and then grows 7% annually through 2025;
- International revenue grows 3% annually;
- Domestic rental revenue per rig and total domestic revenue per rig dip to lows seen during the 2008/2009 downturn through 2017 and then slowly return to the lower end of the previous three year range;
- International indirect expenses remain 3.5% of total international revenue;
- Domestic indirect expense percentages slowly return to historical levels;
- Margins stay in historical ranges;
- Working capital ratios remain consistent; and
- Risk premium related to foreign country security and government stability.

Some of the factors that affected the change in results of the Step 1 impairment test from the second quarter of 2015 to the fourth quarter of 2015 included:

- Crude oil prices had rallied during the second quarter to average $59.82 per barrel in June 2015 versus the January 2015 average of $47.22 per barrel, but subsequently fell during the third and fourth quarters to average $37.19 per barrel in December 2015,
- The dramatic decline in US rig activity had leveled off during June 2015 after having declined 53.3% from the rig activity level as of December 31, 2014, only to decrease another 18.7% in the second half of 2015 to end the year with an outright drop in rig activity of 62.1%.
- The weighted average cost of capital increased from 14.1% in the second quarter of 2015 to 19.1% in the fourth quarter of 2015 as the significance of the international portion of the reporting unit grew, resulting in a higher risk premium associated with international activity.

There are significant inherent uncertainties and judgments involved in estimating fair value. A further extension or deepening of the industry downturn could have a negative impact on the cash flow analysis.

The Company cannot predict the occurrence of events or circumstances that could adversely affect the fair value of goodwill. Such events may include, but are not limited to, deterioration of the economic environment, increases in the Company’s weighted average cost of capital, material negative changes in relationships with significant customers, reductions in valuations of other public companies in the Company’s industry, or strategic decisions made in response to economic and competitive conditions. If actual results are not consistent with the Company’s current estimates and assumptions, impairment of goodwill could be required.

Based on the Company’s fourth quarter 2015 testing of goodwill for impairment at each reporting unit, no impairments were recorded.

Long-Lived Assets Other than Goodwill

Long-lived assets other than goodwill consist of property and equipment and intangible assets that have determinable and indefinite lives. The Company makes judgments and estimates regarding the carrying amount of these assets, including amounts to be capitalized, depreciation and amortization methods to be applied, estimated useful lives, and possible impairments. Property and equipment and intangible assets with determinable lives are tested for impairment whenever events or changes in circumstances indicate the carrying amount of the asset may not be recoverable.

For property and equipment, events or circumstances indicating possible impairment may include a significant decrease in market value or a significant change in the business climate. An impairment loss is recognized when the carrying amount of an asset exceeds the estimated undiscounted future cash flows expected to result from the use of the asset and its eventual disposition. The amount of the impairment loss is the excess of the asset’s carrying amount over its fair value. Fair value is generally determined using an appraisal by an independent valuation firm or by using a discounted cash flow analysis.

For intangible assets with definite lives, events or circumstances indicating possible impairment may include an adverse change in the extent or manner in which the asset is being used or a change in the assessment of future operations. The Company assesses the recoverability of the carrying amount by preparing estimates of future revenue, margins, and cash flows. If the sum of expected future cash flows (undiscounted and without interest charges) is less than the carrying amount, an impairment loss is recognized. The impairment loss recognized is the amount by which the carrying amount exceeds the fair value. Fair value of these assets may be determined by a variety of methodologies, including discounted cash flows.

Intangible assets with indefinite lives are not subject to amortization, but are tested for impairment annually during the fourth quarter, or more frequently if an event occurs or circumstances change that would indicate a potential impairment. These circumstances may include, but are not limited to, a significant adverse change in the business climate, unanticipated competition, or a change in projected operations or results of a reporting unit.

The Company assesses whether an indefinite lived intangible impairment exists using both qualitative and quantitative assessments. The qualitative assessment involves determining whether events or circumstances exist that indicate it is more likely than not that the fair value of the indefinite lived intangible is less than its carrying amount. If, based on this qualitative assessment, it is determined that it is not more likely than not that the fair value of the indefinite lived intangible is less than its carrying amount, the Company does not perform a quantitative assessment.

If the qualitative assessment indicates that it is more likely than not that the indefinite-lived intangible asset is impaired or if the Company elects to not perform a qualitative assessment, the Company then performs the quantitative impairment test. The quantitative impairment test for an indefinite-lived intangible asset consists of a comparison of the fair value of the asset with its carrying amount. If the carrying amount of an intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess. Fair value of these assets may be determined by a variety of methodologies, including discounted cash flows.

The development of future net undiscounted cash flow projections requires management projections of future sales and profitability trends and the estimation of remaining useful lives of assets. These projections are consistent with those projections the Company uses to internally manage operations. When potential impairment is identified, a discounted cash flow valuation model similar to that used to value goodwill at the reporting unit level, incorporating discount rates commensurate with risks associated with each asset, is used to determine the fair value of the asset in order to measure potential impairment. Discount rates are determined by using a WACC. Estimated revenue and WACC assumptions are the most sensitive and susceptible to change in the long-lived asset analysis as they require significant management judgment. The Company believes the assumptions used are reflective of what a market participant would have used in calculating fair value.

Valuation methodologies utilized to evaluate long-lived assets other than goodwill for impairment were consistent with prior periods. Specific assumptions discussed above are updated at each test date to consider current industry and Company-specific risk factors from the perspective of a market participant. The current business climate is subject to evolving

market conditions and requires significant management judgment to interpret the potential impact to the Company’s assumptions. To the extent that changes in the current business climate result in adjustments to management projections, impairment losses may be recognized in future periods.

The domestic drilling industry has continued to deteriorate since the end of 2015 to levels not seen since April 1999. As the business of the Drilling Technologies segment is closely aligned with the drilling rig count and average U.S. drilling rig count declined 27% during the first quarter of 2016, the drop off in rig count led to a decline in revenue and gross profit of 37% and 69%, respectively, from the fourth quarter of 2015 for the Drilling Technologies segment. As a result of the continued drop in rig count and the significant decline in operations in the first quarter of 2016, the Company concluded these were events or circumstances that caused the Company to test its long-lived assets for impairment within the segment.

During the three months ended March 31, 2016, the Company completed testing for impairment of long-lived assets within the Drilling Technologies segment for four asset groups:

- Downhole Tools - primarily used in the vertical drilling market;
- International Drill Pipe - primarily used in foreign mining operations;
- Teledrift Domestic - primarily associated with the Measurement While Drilling (“MWD”) market in the U.S.; and
- Teledrift International - primarily associated with the MWD market in international markets.

Impairment indicators affected both asset groups that are tied directly to the domestic drilling market. While impairment indicators are not present for the International Drill Pipe or Teledrift International asset groups, the Company performed recoverability tests for all four asset groups.

The recoverability test indicated that the undiscounted estimated cash flows of the International Drill Pipe and Teledrift International asset groups exceeded the carrying amount of their respective asset groups by approximately $2.6 million and $64.1 million, respectively, or an excess of 98% and 906%, respectively. However, the undiscounted estimated cash flows of the Downhole Tools and Teledrift Domestic asset groups did not exceed the carrying amount of their respective asset groups, and therefore, the Company performed a discounted cash flow analysis on each asset group to determine the fair values.

Since the assets in the asset groups are not highly specialized, the Company assumed the current use of each asset would be a similar use as if the assets were sold. As such, the cash flow used in the recoverability test is the same cash flow used to create the discounted cash flow for fair value analysis. This testing indicated that the carrying amount of the Downhole Tools and Teledrift Domestic asset groups exceeded the fair value by $9.6 million and $14.3 million, respectively, or an excess of 69% and 56%, respectively. As a result, a combined impairment loss for these two asset groups of $23.9 million was recognized during the three months ended March 31, 2016.

Additionally, the business of the Production Technologies segment incurred similar declines with revenue and gross profit, falling approximately 30% and 42%, respectively. Therefore, the Company completed testing for impairment of long-lived assets within the Production Technologies segment. The recoverability test indicated that the undiscounted estimated cash flows for the segment exceeded the carrying amount of assets by $3.0 million, or an excess of 23%. As a result, no impairment of long-lived assets was recognized for the Production Technologies segment.

During the second quarter of 2016, the average U.S. drilling rig count fell 23% versus the first quarter of 2016. The Drilling Technologies segment held revenue relatively flat and improved margins when comparing the second and first quarters of 2016. As such, the Company determined that testing for impairment of long-lived assets was not warranted for the segment.

However, the Production Technologies segment results showed a decline in revenue of 8% and continuing negative margins when comparing the second and first quarters of 2016. Therefore, the Company completed testing for impairment of long-lived assets within the Production Technologies segment. The recoverability test indicated that the undiscounted estimated cash flows for the segment exceeded the carrying amount of assets by $4.4 million, or an excess of 34%. As a result, no impairment of long-lived assets was recognized for the Production Technologies segment.

During the third quarter of 2016, the average U.S. drilling rig count rose 14% versus the second quarter of 2016. The Drilling Technologies segment revenue increased 13% and improved margins when comparing the third and second quarters of 2016, while the Production Technologies segment results showed an increase in revenue of 15% and improved margins when comparing the third and second quarters of 2016. As such, the Company determined that testing for impairment of long-lived assets was not warranted for either segment.

During the fourth quarter of 2016, the average U.S. drilling rig count rose 23% versus the third quarter of 2016. The Drilling Technologies segment revenue increased 6% and showed slightly lower margins when compared to the third quarter of 2016 but still exceeded second quarter 2016 margins. The Production Technologies segment results showed an increase in revenue of 5% and improved margins when comparing the fourth and third quarters of 2016. As such, the Company determined that testing for impairment of long-lived assets was not warranted for either segment.

Key assumptions and estimates used in performing these recoverability tests were based on experience of the Company’s management, experience with past oil and gas industry downturns and recoveries, and internal, as well as published external, perspectives of recovery timing. Key assumptions used in the recoverability test included:

- Rental tools are the primary cash generating assets for each group;
- Remaining estimated useful life for each group was determined to be 7 years;
- Carrying amount of the asset group is the net book value of the assets as of March 31, 2016, for first quarter testing and June 30, 2016, for second quarter testing;
- Estimates of future cash flows for the group assumed the sale of the group at the end of the remaining useful life of the primary asset; and
- Since the Downhole Tools asset group includes product sales in the cash flow analysis, a portion of the inventory was included in the carrying amount of the asset group. The remaining portion of the inventory is normally utilized to repair and fabricate rental tools and is included in cost of goods sold.

During the second quarter of 2015, as a result of decreased rig activity and its impact on management’s expectations for future market activity, the Company refocused the Drilling Technologies segment to businesses and markets that have the best opportunity for profitable growth in the future. Additionally, the Company shifted the focus of the Production Technologies segment towards oil production markets and away from the less opportunistic CBM markets. As a result of these changes in focus and projected declines in asset utilization, the Company recorded impairment charges for inventory ($18.0 million) and rental equipment ($2.3 million) in the second quarter of 2015. Additionally, an assessment was made regarding possible impairment of property and equipment for (a) the Drilling Technologies asset group and (b) the Production Technologies asset group.

An analysis of the Drilling Technologies asset group showed that discounted future cash flows exceeded the carrying amount of this asset group. In addition, projected future cash flows considering only rental tools would exceed the carrying amount of this asset group in approximately six years. These preliminary analyses clearly indicated that the carrying amount of property and equipment would be recoverable and therefore, the Company did not perform an undiscounted future cash flow analysis for this asset group.

An analysis of the Production Technologies asset group showed that projected future cash flows from two recently introduced products significantly exceeded the carrying amount of this asset group. This preliminary analysis clearly indicated that the carrying amount of property and equipment would be recoverable and therefore, the Company did not perform a more complete analysis of undiscounted future cash flows for this asset group.

There are significant inherent uncertainties and judgments involved in estimating fair value. A further extension or deepening of the industry downturn could have a negative impact on the cash flow analysis.

The Company cannot predict the occurrence of events or circumstances that could adversely affect the fair value of the asset (asset group). Such events may include, but are not limited to, deterioration of the economic environment, increases in the Company's weighted average cost of capital, material negative changes in relationships with significant customers, reductions in valuations of other public companies in the Company's industry, or strategic decisions made in response to economic and competitive conditions. If actual results are not consistent with the Company's current estimates and assumptions, additional impairment of long-lived assets could be required.

In 2017, 2016, and 2015, while testing annual indefinite lived intangible assets for impairment, the Company first assessed qualitative factors to determine whether it was necessary to perform the impairment test. Based on its qualitative assessment, the Company concluded there was no indication of the need for an impairment of indefinite lived intangibles, and therefore no further testing was required.

No impairment was recorded for property and equipment and intangible assets with determinable or indefinite lives during 2017.

Fair Value Measurements

Fair value is defined as the amount that would be received for the sale of an asset or paid for the transfer of a liability in an orderly transaction between unrelated third party market participants at the measurement date. In determination of fair value measurements for assets and liabilities, the Company considers the principal, or most advantageous, market and assumptions that market participants would use when pricing the asset or liability. The Company categorizes financial assets and liabilities using a three-tiered fair value hierarchy, based upon the nature of the inputs used in the determination of fair value. Inputs refer broadly to the assumptions that market participants would use in pricing an asset or liability and may be observable or unobservable. Significant judgments and estimates are required, particularly when inputs are based on pricing for similar assets or liabilities, pricing in non-active markets, or when unobservable inputs are required.

Income Taxes

The Company's tax provision is subject to judgments and estimates necessitated by the complexity of existing regulatory tax statutes and the effect of these upon the Company due to operations in multiple tax jurisdictions. Income tax expense is based on taxable income, statutory tax rates, and tax planning opportunities available in the various jurisdictions in which the Company operates. The Company's income tax expense will fluctuate from year to year as the amount of pretax income fluctuates. Changes in tax laws and the Company's profitability within and across the jurisdictions may impact the Company's tax liability. While the annual tax provision is based on the best information available to the Company at the time of preparation, several years may elapse before the ultimate tax liabilities are determined.

The Company uses the liability method in accounting for income taxes. Deferred tax assets and liabilities are recognized for temporary differences between financial statement carrying amounts and the tax bases of assets and liabilities and are measured using the tax rates expected to be in effect when the differences reverse. Deferred tax assets are also recognized for operating loss and tax credit carry forwards. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period that includes the enactment date. A valuation allowance is used to reduce deferred tax assets when uncertainty exists regarding their realization.

A valuation allowance is recorded to reduce previously recorded tax assets when it becomes more likely than not such assets will not be realized. The Company evaluates, at least annually, net operating loss carry forwards and other net deferred tax assets and considers all available evidence, both positive and negative, to determine whether a valuation allowance is necessary relative to net operating loss carry forwards and other net deferred tax assets. In making this determination, the Company considers cumulative losses in recent years as significant negative evidence. The Company considers recent years to mean the current year plus the two preceding years. The Company considers the recent cumulative income or loss position of its filings groups as objectively verifiable evidence for the projection of future income, which consists primarily of determining the average of the pre-tax income of the current and prior two years after adjusting for certain items not indicative of future performance. Based on this analysis, the Company determines whether a valuation allowance is necessary.

The Company periodically identifies and evaluates uncertain tax positions. This process considers the amounts and probability of various outcomes that could be realized upon final settlement. Liabilities for uncertain tax positions are based on a two-step process. The actual benefits ultimately realized may differ from the Company's estimates. Changes in facts, circumstances, and new information may require a change in recognition and measurement estimates for certain individual tax positions. Any changes in estimates are recorded in results of operations in the period in which the change occurs. At December 31, 2017, the Company performed an evaluation of its various tax positions and concluded that it did not have significant uncertain tax positions requiring disclosure. The Company's policy is to record interest and penalties related to income tax matters as income tax expense.

Share-Based Compensation

The Company has stock-based incentive plans which are authorized to issue stock options, restricted stock, and other incentive awards. Stock-based compensation expense for stock options and restricted stock is determined based upon estimated grant-date fair value. This fair value for the stock options is calculated using the Black-Scholes option-pricing model and is recognized as expense over the requisite service period. The option-pricing model requires the input of highly subjective assumptions, including expected stock price volatility and expected option life. For all stock-based incentive plans, the Company estimates an expected forfeiture rate and recognizes expense only for those shares expected to vest. The estimated forfeiture rate is based on historical experience. To the extent actual forfeiture rates differ from the estimate, stock-based compensation expense is adjusted accordingly.

Loss Contingencies

The Company is subject to a variety of loss contingencies that could arise during the Company's conduct of business. Management considers the likelihood of a loss or impairment of an asset or the incurrence of a liability, as well as the Company's ability to reasonably estimate the amount of loss,

in determining potential loss contingencies. An estimated loss contingency is accrued when it is probable that a liability has been incurred or an asset has been impaired and the amount of loss can be reasonably estimated. Accruals for loss contingencies have not been recorded during the past three years. The Company regularly evaluates current information available to determine whether such accruals should be made or adjusted.

Recent Accounting Pronouncements

Recent accounting pronouncements which may impact the Company are described in Note 2 – "Summary of Significant Accounting Policies" in Part II, Item 8 – "Financial Statements and Supplementary Data" of this Annual Report.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

The Company is exposed to market risk from changes in interest rates, foreign currency exchange rates, and commodity prices. Market risk is measured as the potential negative impact on earnings, cash flows, or fair values resulting from a hypothetical change in interest rates, commodity prices, or foreign currency exchange rates over the next year. The Company manages exposure to market risks at the corporate level. The portfolio of interest-sensitive assets and liabilities is monitored and adjusted to provide liquidity necessary to satisfy anticipated short-term needs. The Company's risk management policies allow the use of specified financial instruments for hedging purposes only. Speculation on interest rates or foreign currency rates is not permitted. The Company does not consider any of these risk management activities to be material.

Interest Rate Risk

The Company is exposed to the impact of interest rate changes on any outstanding indebtedness under the revolving credit facility agreement and the term loan agreement both of which have a variable interest rate. The interest rate on advances under the revolving credit facility varies based on the level of borrowing under the revolving credit facility. Rates range (a) between PNC Bank's base lending rate plus 1.5% to 2.0% or (b) between the London Interbank Offered Rate (LIBOR) plus 2.5% to 3.0%. PNC Bank's base lending rate was 4.50% at December 31, 2017, and would have permitted borrowing at rates ranging between 6.00% and 6.50%. The Company is required to pay a monthly facility fee of 0.25% on any unused amount under the commitment based on daily averages. At December 31, 2017, $28.0 million was outstanding under the revolving credit facility, with $6.0 million borrowed as base rate loans at an interest rate of 6.00% and $22.0 million borrowed as LIBOR loans at an interest rate of 4.07%.

The amount borrowed under the term loan was reset to $10.0 million as of September 30, 2016. Monthly principal

payments of $0.2 million were required. On May 22, 2017, the Company repaid the outstanding balance of the term loan.

Foreign Currency Exchange Risk

The Company presently has limited exposure to foreign currency risk. As a global company, Flotek operates in over 20 domestic and international markets. Flotek's functional currency is primarily the U.S. dollar. During 2017, approximately 2.0% of revenue was demarcated in non-U.S. dollar currencies and virtually all assets and liabilities of the Company are denominated in U.S. dollars. However, as the Company expands its international operations, non-U.S. denominated activity is likely to increase. The Company has historically performed no swaps and no foreign currency hedges. The Company may utilize swaps or foreign currency hedges in the future.

Commodity Risk

The Company is one of the largest processors of citrus oils in the world and, therefore, has a commodity risk inherent in orange harvests. In recent years, citrus greening has disrupted citrus fruit production in Florida and Brazil which caused raw material feedstock cost to increase. Tropical storms and hurricanes, as experienced during 2017, can also impact the future citrus crop yields in growing regions. The Company believes that adequate global supply is available to meet the Company's needs and the needs of general chemistry markets at this time. The Company primarily relies upon diverse, long-term strategic supply relationships to meet its raw material needs which are expected to remain in place for the foreseeable future. Price increases have been passed along to the Company's customers, where applicable. The Company presently does not have any commodity futures contracts but may consider utilizing forms of hedging from time to time in the future.

The Company purchased IPI in July 2016, an importer and processor of guar splits into fast hydrating guar powder at its facility in Dalton, Georgia. Guar powder is used as a gelling agent for fluid systems in the completion of oil and gas wells. Guar seed is largely produced in India and Pakistan and has inherent commodity risk associated with agricultural crops

and geopolitical uncertainty. The Company believes its inventory and supply agreements are well positioned to meet market needs at this time. Although there are international, publicly traded exchanges for guar seed, the Company presently does not have any futures contracts.

Item 8. Financial Statements and Supplementary Data.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of
Flotek Industries, Inc.

Opinion on Internal Control over Financial Reporting

We have audited Flotek Industries, Inc. and subsidiaries' (the "Company") internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework 2013 issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). In our opinion, the Company maintained, in all material respects, effective control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework 2013 issued by COSO.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheet of Flotek Industries, Inc. and subsidiaries as of December 31, 2017, the related consolidated statements of operations, comprehensive income (loss), equity and cash flows for the year then ended, and the related notes (collectively referred to as the "consolidated financial statements") and our report dated March 8, 2018 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ MOSS ADAMS LLP

Houston, Texas

March 8, 2018

We have served as the Company’s independent registered public accounting firm since 2017.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and the Board of Directors of
Flotek Industries, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheet of Flotek Industries, Inc. and subsidiaries (the “Company”) as of December 31, 2017, the related consolidated statements of operations, comprehensive income (loss), equity and cash flows for the year then ended, and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Company as of December 31, 2017, and the consolidated results of their operations and their cash flows for the year ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Company’s internal control over financial reporting as of December 31, 2017, based on criteria established in Internal Control - Integrated Framework 2013 issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 8, 2018 expressed an unqualified opinion on the Company’s internal control over financial reporting.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s consolidated financial statements based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures to respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

/s/ MOSS ADAMS LLP

Houston, Texas
March 8, 2018

We have served as the Company’s independent registered public accounting firm since 2017.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Flotek Industries, Inc.

We have audited the accompanying consolidated balance sheet of Flotek Industries, Inc. and subsidiaries as of December 31, 2016 and the related consolidated statements of operations, comprehensive income (loss), equity and cash flows for each of the two years in the period ended December 31, 2016. 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. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Flotek Industries, Inc. and subsidiaries as of December 31, 2016 and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles.

/s/ HEIN & ASSOCIATES LLP

Houston, Texas
February 8, 2017

FLOTEK INDUSTRIES, INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	December 31, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	$4,584	$4,823
Accounts receivable, net of allowance for doubtful accounts of $733 and $664 at December 31, 2017 and 2016, respectively	46,018	47,152
Inventories	75,759	58,283
Income taxes receivable	2,826	12,752
Assets held for sale	—	43,900
Other current assets	9,264	21,708
Total current assets	138,451	188,618
Property and equipment, net	73,833	74,691
Goodwill	56,660	56,660
Deferred tax assets, net	12,713	12,894
Other intangible assets, net	48,231	50,352
TOTAL ASSETS	$329,888	$383,215
LIABILITIES AND EQUITY		
Current liabilities:		
Accounts payable	$22,048	$29,960
Accrued liabilities	14,589	12,170
Interest payable	43	24
Liabilities held for sale	—	4,961
Current portion of long-term debt	27,950	40,566
Total current liabilities	64,630	87,681
Long-term debt, less current portion	—	7,833
Total liabilities	64,630	95,514
Commitments and contingencies		
Equity:		
Cumulative convertible preferred stock, $0.0001 par value, 100,000 shares authorized; no shares issued and outstanding	—	—
Common stock, $0.0001 par value, 80,000,000 shares authorized; 60,622,986 shares issued and 56,755,293 shares outstanding at December 31, 2017; 59,684,669 shares issued and 56,972,580 shares outstanding at December 31, 2016	6	6
Additional paid-in capital	336,067	318,392
Accumulated other comprehensive income (loss)	(884)	(956)
Retained earnings (accumulated deficit)	(37,225)	(9,830)
Treasury stock, at cost; 3,621,435 and 2,028,847 shares at December 31, 2017 and 2016, respectively	(33,064)	(20,269)
Flotek Industries, Inc. stockholders' equity	264,900	287,343
Noncontrolling interests	358	358
Total equity	265,258	287,701
TOTAL LIABILITIES AND EQUITY	$329,888	$383,215

See accompanying Notes to Consolidated Financial Statements.

FLOTEK INDUSTRIES, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)

	Year ended December 31,		
	2017	2016	2015
Revenue	$317,098	$262,832	$269,966
Costs and expenses:			
Cost of revenue (excluding depreciation and amortization)	215,129	170,255	172,033
Corporate general and administrative	41,492	43,745	38,623
Segment selling and administrative	37,236	36,405	31,653
Depreciation and amortization	12,159	10,429	8,735
Research and development	13,645	9,320	6,657
Loss (gain) on disposal of long-lived assets	292	(18)	(13)
Total costs and expenses	319,953	270,136	257,688
(Loss) income from operations	(2,855)	(7,304)	12,278
Other (expense) income:			
Interest expense	(2,168)	(1,979)	(1,521)
Gain on legal settlement	—	12,730	—
Other (expense) income, net	812	(303)	(123)
Total other (expense) income	(1,356)	10,448	(1,644)
(Loss) income before income taxes	(4,211)	3,144	10,634
Income tax expense	(8,842)	(1,237)	(3,476)
(Loss) income from continuing operations	(13,053)	1,907	7,158
Loss from discontinued operations, net of tax	(14,342)	(51,037)	(20,620)
Net loss	$(27,395)	$(49,130)	$(13,462)
Basic earnings (loss) per common share:			
Continuing operations	$(0.23)	$0.03	$0.13
Discontinued operations, net of tax	(0.25)	(0.91)	(0.38)
Basic earnings (loss) per common share	$(0.48)	$(0.88)	$(0.25)
Diluted earnings (loss) per common share:			
Continuing operations	$(0.23)	$0.03	$0.13
Discontinued operations, net of tax	(0.25)	(0.91)	(0.37)
Diluted earnings (loss) per common share	$(0.48)	$(0.88)	$(0.24)
Weighted average common shares:			
Weighted average common shares used in computing basic earnings (loss) per common share	57,580	56,087	54,459
Weighted average common shares used in computing diluted earnings (loss) per common share	57,580	56,350	54,992

See accompanying Notes to Consolidated Financial Statements.

FLOTEK INDUSTRIES, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in thousands)

	Year ended December 31,		
	2017	2016	2015
(Loss) income from continuing operations	$(13,053)	$1,907	$7,158
Loss from discontinued operations, net of tax	(14,342)	(51,037)	(20,620)
Net loss	(27,395)	(49,130)	(13,462)
Other comprehensive income (loss):			
Foreign currency translation adjustment	72	281	(735)
Comprehensive loss	$(27,323)	$(48,849)	$(14,197)

See accompanying Notes to Consolidated Financial Statements.

FLOTEK INDUSTRIES, INC.
CONSOLIDATED STATEMENTS OF EQUITY
(in thousands)

	Common Stock		Treasury Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income (Loss)	Retained Earnings (Accumulated Deficit)	Non-controlling Interests	Total Equity
	Shares Issued	Par Value	Shares	Cost					
Balance, December 31, 2014	54,634	$ 5	449	$ (495)	$ 254,233	$ (502)	$ 52,762	$ 351	$ 306,354
Net loss	—	—	—	—	—	—	(13,462)	—	(13,462)
Foreign currency translation adjustment	—	—	—	—	—	(735)	—	—	(735)
Stock issued under employee stock purchase plan	—	—	(77)	—	879	—	—	—	879
Stock options exercised	768	1	—	—	1,371	—	—	—	1,372
Restricted stock granted	758	—	—	—	—	—	—	—	—
Restricted stock forfeited	—	—	33	—	—	—	—	—	—
Treasury stock purchased	—	—	473	(6,345)	—	—	—	—	(6,345)
Stock surrendered for exercise of stock options	—	—	107	(1,332)	—	—	—	—	(1,332)
Excess tax benefit related to share-based awards	—	—	—	—	1,273	—	—	—	1,273
Stock compensation expense	—	—	—	—	14,681	—	—	—	14,681
Investment in Flotek Gulf, LLC and Flotek Gulf Research, LLC	—	—	—	—	—	—	—	7	7
Stock issued in IAL acquisition	60	—	—	—	1,014	—	—	—	1,014
Repurchase of common stock	—	—	800	(9,697)	—	—	—	—	(9,697)
Balance, December 31, 2015	56,220	$ 6	1,785	$ (17,869)	$ 273,451	$ (1,237)	$ 39,300	$ 358	$ 294,009
Net loss	—	—	—	—	—	—	(49,130)	—	(49,130)
Foreign currency translation adjustment	—	—	—	—	—	281	—	—	281
Sale of common stock, net of issuance cost	2,450	—	—	—	30,090	—	—	—	30,090
Stock issued under employee stock purchase plan	—	—	(93)	—	833	—	—	—	833
Stock options exercised	114	—	—	—	184	—	—	—	184
Restricted stock granted	653	—	—	—	—	—	—	—	—
Restricted stock forfeited	—	—	96	—	—	—	—	—	—

Treasury stock purchased	—	—	238	(2,350)	—	—	—	—	(2,350)
Stock surrendered for exercise of stock options	—	—	3	(50)	—	—	—	—	(50)
Reduction in tax benefit related to share-based awards	—	—	—	—	(2,510)	—	—	—	(2,510)
Stock compensation expense	—	—	—	—	13,076	—	—	—	13,076
Stock issued in IPI acquisition	248	—	—	—	3,268	—	—	—	3,268
Balance, December 31, 2016	59,685	$ 6	2,029	$ (20,269)	$ 318,392	$ (956)	$ (9,830)	$ 358	$ 287,701
Net loss	—	—	—	—	—	—	(27,395)	—	(27,395)
Foreign currency translation adjustment	—	—	—	—	—	72	—	—	72
Stock issued under employee stock purchase plan	—	—	(113)	—	654	—	—	—	654
Common stock issued in payment of accrued liability	—	—	—	—	188	—	—	—	188
Stock options exercised	663	—	—	—	5,884	—	—	—	5,884
Restricted stock granted	275	—	—	—	—	—	—	—	—
Restricted stock forfeited	—	—	122	—	—	—	—	—	—
Treasury stock purchased	—	—	200	(1,729)	—	—	—	—	(1,729)
Stock surrendered for exercise of stock options	—	—	478	(5,863)	—	—	—	—	(5,863)
Stock compensation expense	—	—	—	—	10,949	—	—	—	10,949
Repurchase of common stock	—	—	905	(5,203)	—	—	—	—	(5,203)
Balance, December 31, 2017	60,623	$ 6	3,621	$ (33,064)	$ 336,067	$ (884)	$ (37,225)	$ 358	$ 265,258

See accompanying Notes to Consolidated Financial Statements.

FLOTEK INDUSTRIES, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)

	Year ended December 31,		
	2017	2016	2015
Cash flows from operating activities:			
Net loss	$(27,395)	$(49,130)	$(13,462)
Loss from discontinued operations, net of tax	(14,342)	(51,037)	(20,620)
(Loss) income from continuing operations	(13,053)	1,907	7,158
Adjustments to reconcile (loss) income from continuing operations to net cash provided by operating activities:			
Depreciation and amortization	12,159	10,429	8,735
Amortization of deferred financing costs	472	424	346
Provision for doubtful accounts	113	558	367
Loss (gain) on sale of assets	292	(18)	(12)
Stock compensation expense	11,172	12,053	13,083
Deferred income tax provision (benefit)	181	(19,681)	(7,929)
Reduction in (excess) tax benefit related to share-based awards	1,989	2,510	(1,273)
Changes in current assets and liabilities:			
Accounts receivable, net	1,456	(11,544)	13,676
Inventories	(17,291)	(6,528)	(9,905)
Income taxes receivable	8,008	(8,189)	(4,700)
Other current assets	12,153	(14,489)	167
Accounts payable	(8,719)	12,653	(7,653)
Accrued liabilities	8,180	23,946	9,552
Income taxes payable	—	(1,890)	3,842
Interest payable	19	(87)	18
Net cash provided by operating activities	17,131	2,054	25,472
Cash flows from investing activities:			
Capital expenditures	(8,960)	(13,960)	(16,391)
Proceeds from sale of businesses	18,490	—	—
Proceeds from sale of assets	689	115	13
Payments for acquisitions, net of cash acquired	—	(7,863)	—
Purchase of patents and other intangible assets	(479)	(573)	(627)
Net cash provided by (used in) investing activities	9,740	(22,281)	(17,005)
Cash flows from financing activities:			
Repayments of indebtedness	(9,833)	(15,564)	(10,143)
Borrowings on revolving credit facility	383,160	338,460	382,666
Repayments on revolving credit facility	(393,776)	(325,043)	(366,018)
Debt issuance costs	(579)	(1,199)	(10)
(Reduction in) excess tax benefit related to share-based awards	—	(2,510)	1,273
Purchase of treasury stock	(1,729)	(2,350)	(6,345)
Proceeds from sale of common stock	654	30,923	879
Repurchase of common stock	(5,203)	—	(9,697)
Proceeds from exercise of stock options	21	134	39
Proceeds from noncontrolling interest	—	—	7
Net cash (used in) provided by financing activities	(27,285)	22,851	(7,349)
Discontinued operations:			
Net cash (used in) provided by operating activities	(684)	12	1,199
Net cash provided by (used in) investing activities	708	(18)	(1,199)

Net cash flows provided by (used in) discontinued operations	24	(6)	—
Effect of changes in exchange rates on cash and cash equivalents	151	(3)	(176)
Net (decrease) increase in cash and cash equivalents	(239)	2,615	942
Cash and cash equivalents at beginning of year	4,823	2,208	1,266
Cash and cash equivalents at end of year	$4,584	$4,823	$2,208

See accompanying Notes to Consolidated Financial Statements.

FLOTEK INDUSTRIES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1 — Organization and Nature of Operations

Flotek Industries, Inc. ("Flotek" or the "Company") is a global, diversified, technology-driven company that develops and supplies chemistries and services to the oil and gas industries, and high value compounds to companies that make food and beverages, cleaning products, cosmetics, and other products that are sold in consumer and industrial markets.

The Company's oilfield business includes specialty chemistries and logistics which enable its customers in pursuing improved efficiencies in the drilling and completion of their wells. The Company also provides automated bulk material handling, loading facilities, and blending capabilities. The Company processes citrus oil to produce (1) high value compounds used as additives by companies in the flavors and fragrances markets and (2) environmentally friendly chemistries for use in numerous industries around the world, including the oil and gas ("O&G") industry.

Flotek operates in over 20 domestic and international markets. Customers include major integrated O&G companies, oilfield services companies, independent O&G companies, pressure-pumping service companies, national and state-owned oil companies, and international supply chain management companies. The Company also serves customers who purchase non-energy-related citrus oil and related products, including household and commercial cleaning product companies, fragrance and cosmetic companies, and food manufacturing companies.

Flotek was initially incorporated under the laws of the Province of British Columbia on May 17, 1985. On October 23, 2001, Flotek changed its corporate domicile to the state of Delaware.

Note 2 — Summary of Significant Accounting Policies

Basis of Presentation

The Company's consolidated financial statements have been prepared in accordance with the accounting principles generally accepted in the United States of America ("U.S. GAAP").

The consolidated financial statements include the accounts of Flotek Industries, Inc. and all wholly-owned subsidiary corporations. Where Flotek owns less than 100% of the share capital of its subsidiaries, but is still considered to have sufficient ownership to control the business, results of the business operations are consolidated within the Company's financial statements. The ownership interests held by other parties are shown as noncontrolling interests.

During the fourth quarter of 2016, the Company classified the Drilling Technologies and Production Technologies segments as held for sale based on management's intention to sell these businesses. The Company's historical financial statements have been revised to present the operating results of the Drilling Technologies and Production Technologies segments as discontinued operations. The results of operations of Drilling Technologies and Production Technologies are presented as "Loss from discontinued operations" in the statement of operations and the related cash flows of these segments has been reclassified to discontinued operations for all periods presented. The assets and liabilities of the Drilling Technologies and Production Technologies segments have been reclassified to "Assets held for sale" and "Liabilities held for sale", respectively, in the consolidated balance sheet for all periods presented.

During 2017, the Company completed the sale or disposal of the assets and transfer or liquidation of liabilities and obligations of each of the Drilling Technologies and Production Technologies segments.

All significant intercompany accounts and transactions have been eliminated in consolidation. The Company does not have investments in any unconsolidated subsidiaries.

Cash Equivalents

Cash equivalents consist of highly liquid investments with maturities of three months or less at the date of purchase.

Cash Management

The Company uses a controlled disbursement account for its main cash account. Under this system, outstanding checks can be in excess of the cash balances at the bank before the disbursement account is funded, creating a book overdraft. Book overdrafts on this account are presented as a current liability in accounts payable in the consolidated balance sheets.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable arise from product sales and services and are stated at estimated net realizable value. This value incorporates an allowance for doubtful accounts to reflect any loss anticipated on accounts receivable balances. The Company regularly evaluates its accounts receivable to estimate amounts that will not be collected and records the appropriate provision for doubtful accounts as a charge to operating expenses. The allowance for doubtful accounts is based on a combination of the age of the receivables, individual

FLOTEK INDUSTRIES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

customer circumstances, credit conditions, and historical write-offs and collections. The Company writes off specific accounts receivable when they are determined to be uncollectible.
The majority of the Company’s customers are engaged in the energy industry. The cyclical nature of the energy industry may

affect customers’ operating performance and cash flows, which directly impact the Company’s ability to collect on outstanding obligations. Additionally, certain customers are located in international areas that are inherently subject to risks of economic, political, and civil instability, which can impact the collectability of receivables.

Changes in the allowance for doubtful accounts for continuing operations are as follows (in thousands):

	Year ended December 31,		
	2017	2016	2015
Balance, beginning of year	$664	$709	$510
Charged to provision for doubtful accounts	113	558	367
Write-offs	(44)	(603)	(168)
Balance, end of year	$733	$664	$709

Inventories
Inventories consist of raw materials, work-in-process, and finished goods and are stated at the lower of cost, determined using the weighted-average cost method, or net realizable value. Finished goods inventories include raw materials, direct labor, and production overhead. The Company regularly reviews inventories on hand and current market conditions to determine if the cost of finished goods inventories exceeds current market prices and impairs the cost basis of the inventory accordingly. Historically, the Company recorded a provision for excess and obsolete inventory. Impairment or provisions are based primarily on forecasts of product demand, historical trends, market conditions, production, or procurement requirements and technological developments and advancements.
Property and Equipment
Property and equipment are stated at cost. The cost of ordinary maintenance and repair is charged to operating expense, while replacement of critical components and major improvements are capitalized. Depreciation or amortization of property and equipment, including assets held under capital leases, is calculated using the straight-line method over the asset’s estimated useful life as follows:

Buildings and leasehold improvements	2-30 years
Machinery, equipment, and rental tools	7-10 years
Furniture and fixtures	3 years
Transportation equipment	2-5 years
Computer equipment and software	3-7 years

Property and equipment are reviewed for impairment on an annual basis or whenever events or changes in circumstances indicate the carrying amount of an asset or asset group may not be recoverable. Indicative events or circumstances include, but are not limited to, matters such as a significant decline in market value or a significant change in business climate. An

impairment loss is recognized when the carrying amount of an asset exceeds the estimated undiscounted future cash flows from the use of the asset and its eventual disposition. The amount of impairment loss recognized is the excess of the asset’s carrying amount over its fair value. Assets to be disposed of are reported at the lower of the carrying amount or the fair value less cost to sell. Upon sale or other disposition of an asset, the Company recognizes a gain or loss on disposal measured as the difference between the net carrying amount of the asset and the net proceeds received.
Internal Use Computer Software Costs

Direct costs incurred to purchase and develop computer software for internal use are capitalized during the application development and implementation stages. These software costs have been primarily for enterprise-level business and finance software that is customized to meet the Company's specific operational needs. Capitalized costs are included in property and equipment and are amortized on a straight-line basis over the estimated useful life of the software beginning when the software project is substantially complete and placed in service. Costs incurred during the preliminary project stage and costs for training, data conversion, and maintenance are expensed as incurred.

The Company amortizes software costs using the straight-line method over the expected life of the software, generally 3 to 7 years. The unamortized amount of capitalized software was $4.0 million at December 31, 2017.

Goodwill

Goodwill is the excess of cost of an acquired entity over the amounts assigned to identifiable assets acquired and liabilities assumed in a business combination. Goodwill is not subject to amortization, but is tested for impairment annually during the fourth quarter, or more frequently if an event occurs or circumstances change that would indicate a potential impairment. These circumstances may include an adverse change in the business climate or a change in the assessment of future operations of a reporting unit.

The Company assesses whether a goodwill impairment exists using both qualitative and quantitative assessments. The qualitative assessment involves determining whether events or circumstances exist that indicate it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. If, based on this qualitative assessment, it is determined that it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, the Company does not perform a quantitative assessment.

If the qualitative assessment indicates that it is more likely than not that the fair value of a reporting unit is less than its carrying amount or if the Company elects not to perform a qualitative assessment, a quantitative impairment test is performed to determine whether goodwill impairment exists at the reporting unit.

The quantitative impairment test, used to identify both the existence of impairment and the amount of impairment loss, compares the estimated fair value of each reporting unit with goodwill to its carrying amount, including goodwill. To determine fair value estimates, the Company uses the income approach based on discounted cash flow analyses, combined, when appropriate, with a market-based approach. The market-based approach considers valuation comparisons of recent public sale transactions of similar businesses and earnings multiples of publicly traded businesses operating in industries consistent with the reporting unit. If the carrying amount of a reporting unit, including goodwill, exceeds its fair value, an impairment loss is recognized in an amount equal to that excess, limited to the amount of goodwill allocated to that reporting unit.

Other Intangible Assets

The Company's other intangible assets have finite and indefinite lives and consist of customer relationships, trademarks, brand names, and purchased patents.

The cost of intangible assets with finite lives is amortized using the straight-line method over the estimated period of economic benefit, ranging from 2 to 20 years. Asset lives are adjusted whenever there is a change in the estimated period of economic benefit. No residual value has been assigned to these intangible assets.

Intangible assets with finite lives are tested for impairment whenever events or changes in circumstances indicate the carrying amount may not be recoverable. These conditions may include a change in the extent or manner in which the asset is being used or a change in future operations. The Company assesses the recoverability of the carrying amount by preparing estimates of future revenue, margins, and cash flows. If the sum of expected future cash flows (undiscounted and without interest charges) is less than the carrying amount, an impairment loss is recognized. The impairment loss recognized is the amount by which the carrying amount exceeds the fair value. Fair value of these assets may be determined by a variety of methodologies, including discounted cash flow models.

Intangible assets with indefinite lives are not subject to amortization, but are tested for impairment annually during the fourth quarter, or more frequently if an event occurs or circumstances change that would indicate a potential impairment. These circumstances may include, but are not limited to, a significant adverse change in the business climate, unanticipated competition, or a change in projected operations or results of a reporting unit.

The Company assesses whether an indefinite lived intangible impairment exists using both qualitative and quantitative assessments. The qualitative assessment involves determining whether events or circumstances exist that indicate it is more likely than not that the fair value of the indefinite lived intangible is less than its carrying amount. If, based on this qualitative assessment, it is determined that it is not more likely than not that the fair value of the indefinite lived intangible is less than its carrying amount, the Company does not perform a quantitative assessment.

If the qualitative assessment indicates that it is more likely than not that the indefinite-lived intangible asset is impaired or if the Company elects to not perform a qualitative assessment, the Company then performs the quantitative impairment test. The quantitative impairment test for an indefinite-lived intangible asset consists of a comparison of the fair value of the asset with its carrying amount. If the carrying amount of an intangible asset exceeds its fair value, an impairment loss is recognized in an amount equal to that excess. Fair value of these assets may be determined by a variety of methodologies, including discounted cash flows.

Business Combinations

The Company includes the results of operations of its acquisitions in its consolidated results, prospectively from the date of acquisition. Acquisitions are accounted for by applying the acquisition method. The Company allocates the fair value of purchase consideration to the assets acquired, liabilities assumed, and any noncontrolling interests in the acquired entity generally based on their fair values at the acquisition date. The excess of the fair value of purchase consideration over the fair value of these assets acquired, liabilities assumed, and any noncontrolling interests in the acquired entity is recorded as goodwill. The primary items that generate goodwill include the value of the synergies between the acquired company and Flotek and the value of the acquired assembled workforce. Acquisition-related expenses are recognized separately from the business acquisition and are recognized as expenses as incurred.

FLOTEK INDUSTRIES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Fair Value Measurements

The Company categorizes financial assets and liabilities using a three-tier fair value hierarchy, based on the nature of the inputs used to determine fair value. Inputs refer broadly to assumptions market participants would use to value an asset or liability and may be observable or unobservable. The hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities (level 1) and the lowest priority to unobservable inputs (level 3). “Level 1” measurements are measurements using quoted prices in active markets for identical assets and liabilities. “Level 2” measurements are measurements using quoted prices in markets that are not active or that are based on quoted prices for similar assets or liabilities. “Level 3” measurements are measurements that use significant unobservable inputs which require a company to develop its own assumptions. When determining the fair value of assets and liabilities, the Company uses the most reliable measurement available.

Revenue Recognition

Revenue for product sales and services is recognized when all of the following criteria have been met: (i) persuasive evidence of an arrangement exists, (ii) products are shipped or services are rendered to the customer and significant risks and rewards of ownership have passed to the customer, (iii) the price to the customer is fixed and determinable, and (iv) collectability is reasonably assured. Products and services are sold with fixed or determinable prices and do not include right of return provisions or other significant post-delivery obligations. Deposits and other funds received in advance of delivery are deferred until the transfer of ownership is complete. Shipping and handling costs are reflected in cost of revenue. Taxes collected are not included in revenue; rather, taxes are accrued for future remittance to governmental authorities.

For certain contracts related to the EOGA division and the Logistics division of the Energy Chemistry Technologies segment, the Company recognizes revenue under the percentage-of-completion method of accounting, measured by the percentage of “costs incurred to date” to the “total estimated costs of completion.” This percentage is applied to the “total estimated revenue at completion” to calculate proportionate revenue earned to date. Contracts for services are inclusive of direct labor and material costs, as well as, indirect costs of operations. General and administrative costs are charged to expense as incurred. Changes in job performance metrics and estimated profitability, including contract bonus or penalty provisions and final contract settlements, are recognized in the period such revisions appear probable. Known or anticipated losses on contracts are recognized in full when amounts are probable and estimable.

The Company generally is not contractually obligated to accept returns, except for defective products. Typically products determined to be defective are replaced or the customer is issued a credit memo. There is typically no right of return or any significant post-delivery obligations. All costs associated with product returns are expensed as incurred.

Foreign Currency Translation

Financial statements of foreign subsidiaries are prepared using the currency of the primary economic environment of the foreign subsidiaries as the functional currency. Assets and liabilities of foreign subsidiaries are translated into U.S. dollars at exchange rates in effect as of the end of identified reporting periods. Revenue and expense transactions are translated using the average monthly exchange rate for the reporting period. Resultant translation adjustments are recognized as other comprehensive income (loss) within stockholders’ equity.

Comprehensive Income (Loss)

Comprehensive income (loss) encompasses all changes in stockholders’ equity, except those arising from investments from and distributions to stockholders. The Company’s comprehensive income (loss) includes net income (loss) and foreign currency translation adjustments.

Research and Development Costs

Expenditures for research activities relating to product development and improvement are charged to expense as incurred.

Income Taxes

During the year ended December 31, 2015, the Company restructured its legal entities such that there is only one U.S. tax filing group filing a single U.S. consolidated federal income tax return beginning in 2016.

The Company uses the liability method in accounting for income taxes. Deferred tax assets and liabilities are recognized for temporary differences between financial statement carrying amounts and the tax bases of assets and liabilities and are measured using the tax rates expected to be in effect when the differences reverse. Deferred tax assets and liabilities are recognized related to the anticipated future tax effects of temporary differences between the financial statement basis and the tax basis of the Company's assets and liabilities using statutory tax rates at the applicable year end. Deferred tax assets are also recognized for operating loss and tax credit carry forwards. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the results of operations in the period that includes the enactment date. A valuation allowance is used to reduce deferred tax assets when uncertainty exists regarding their realization.

A valuation allowance is recorded to reduce previously recorded tax assets when it becomes more likely than not that such assets will not be realized. The Company evaluates, at least annually, net operating loss carry forwards and other net deferred tax assets and considers all available evidence, both positive and negative, to determine whether a valuation allowance is necessary relative to net operating loss carry forwards and other net deferred tax assets. In making this determination, the Company considers cumulative losses in recent years as significant negative evidence. The Company considers recent years to mean the current year plus the two preceding years. The Company considers the recent cumulative income or loss position as objectively verifiable evidence for the projection of future income, which consists primarily of determining the average of the pre-tax income of the current and prior two years after adjusting for certain items not indicative of future performance. Based on this analysis, the Company determines whether a valuation allowance is necessary.

Historically, U.S. Federal income taxes are not provided on unremitted earnings of subsidiaries operating outside the U.S. because it is the Company’s intention to permanently reinvest undistributed earnings in the subsidiary. These earnings would become subject to income tax if they were remitted as dividends or loaned to a U.S. affiliate. Due to the 2017 Tax Cuts and Jobs Act, U.S. federal transition taxes have been recorded at December 31, 2017, for a one-time U.S. tax liability on those earnings which have not previously been repatriated to the U.S. Determination of the amount of unrecognized deferred U.S. income tax liability on these unremitted earnings is not practicable.

The Company has performed an evaluation and concluded that there are no significant uncertain tax positions requiring recognition in the Company’s financial statements.

The Company’s policy is to record interest and penalties related to income tax matters as income tax expense.

Earnings (Loss) Per Share

Basic earnings (loss) per common share is calculated by dividing net income (loss) available to common stockholders by the weighted average number of common shares outstanding for the period. Diluted earnings (loss) per share is calculated by dividing net income (loss) attributable to common stockholders, adjusted for the effect of assumed conversions of convertible notes and preferred stock, by the weighted average number of common shares outstanding, including potentially dilutive common share equivalents, if the effect is dilutive. Potentially dilutive common shares equivalents consist of incremental shares of common stock issuable upon exercise of stock options and warrants, settlement of restricted stock units, and conversion of convertible notes and convertible preferred stock.

Debt Issuance Costs

Costs related to debt issuance are capitalized and amortized as interest expense over the term of the related debt using the straight-line method, which approximates the effective interest method. Upon the repayment of debt, the Company accelerates the recognition of an appropriate amount of the costs as interest expense.

Capitalization of Interest

Interest costs are capitalized for qualifying in-process software development projects. Capitalization of interest commences when activities to prepare the asset are in progress and expenditures and borrowing costs are being incurred. Interest costs are capitalized until the assets are ready for their intended use. Capitalized interest is added to the cost of the underlying assets and amortized over the estimated useful lives of the assets.

Stock-Based Compensation

Stock-based compensation expense for share-based payments, related to stock options, restricted stock awards, and restricted stock units, is recognized based on their grant-date fair values. The Company recognizes compensation expense, net of estimated forfeitures, on a straight-line basis over the requisite service period of the award. Estimated forfeitures are based on historical experience.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect reported amounts of assets and liabilities, disclosure of contingent assets and liabilities, and reported amounts of revenue and expenses. Actual results could differ from these estimates.

Significant items subject to estimates and assumptions include application of the percentage-of-completion method of revenue recognition, the carrying amount and useful lives of property and equipment and intangible assets, impairment assessments, share-based compensation expense, and valuation allowances for accounts receivable, inventories, and deferred tax assets.

Assets and Liabilities Held for Sale

The Company classifies disposal groups as held for sale in the period in which all of the following criteria are met: (1) management, having the authority to approve the action, commits to a plan to sell the disposal group; (2) the disposal group is available for immediate sale in its present condition subject only to terms that are usual and customary for sales of such disposal groups; (3) an active program to locate a buyer or buyers and other actions required to complete the plan to sell the disposal group have been initiated; (4) the sale of the disposal group is probable, and transfer of the disposal group is expected to qualify for recognition as a completed sale, within one year, except if events of circumstances beyond the Company's control extend the period of time required to sell the disposal group beyond one year; (5) the disposal group is being actively marketed for sale at a price that is reasonable in relation to its current fair value; and (6) actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or that the plan will be withdrawn.

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A disposal group that is classified as held for sale is initially measured at the lower of its carrying amount or fair value less any costs to sell. Any loss resulting from this measurement is recognized in the period in which the held for sale criteria are met.

Subsequent changes in the fair value of a disposal group less any costs to sell are reported as an adjustment to the carrying amount of the disposal group, as long as the new carrying amount does not exceed the carrying amount of the asset at the time it was initially classified as held for sale. Upon determining that a disposal group meets the criteria to be classified as held for sale, the Company reports the assets and liabilities of the disposal group for all periods presented in the line items assets held for sale and liabilities held for sale, respectively, in the consolidated balance sheets.

Discontinued Operations

The results of operations of a component of the Company that can be clearly distinguished, operationally and for financial reporting purposes, that either has been disposed of or is classified as held for sale is reported in discontinued operations, if the disposal represents a strategic shift that has, or will have, a major effect on the Company's operations and financial results.

General corporate overhead is not allocated to discontinued operations for all periods presented. Interest expense on debt required to be repaid as a result of disposal transactions is allocated to discontinued operations. Interest allocated to discontinued operations totaled $0.2 million, $0.4 million, and $0.2 million for the years ended December 31, 2017, 2016, and 2015, respectively.

Reclassifications

Certain prior year amounts have been reclassified to conform to the current year presentation. The reclassifications did not impact net income.

New Accounting Pronouncements

(a) Application of New Accounting Standards

Effective January 1, 2017, the Company adopted the accounting guidance in Accounting Standards Update ("ASU") No. 2015-11, "Simplifying the Measurement of Inventory." This standard requires management to measure inventory at the lower of cost or net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal, and transportation. Implementation of this standard did not have a material effect on the consolidated financial statements and related disclosures.

Effective January 1, 2017, the Company adopted the accounting guidance in ASU No. 2015-17, "Balance Sheet Classification of Deferred Taxes." This standard eliminated the requirement for organizations to present deferred tax assets and liabilities as current and noncurrent in a classified balance sheet. Instead, organizations are now required to classify all deferred tax assets and liabilities as noncurrent. Implementation of this standard did not have a material effect on the consolidated financial statements and related disclosures. The Company applied this standard retrospectively and, therefore, prior periods presented were adjusted.

Effective January 1, 2017, the Company adopted the accounting guidance in ASU No. 2016-09, "Improvements to Employee Share-Based Payment Accounting." This standard simplifies several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The new guidance requires excess tax benefits and deficiencies to be recognized in the income statement rather than in additional paid-in capital. As a result of applying this change, the Company recognized a $2.0 million reduction in tax benefit in the provision for incomes taxes during the year ended December 31, 2017. The Company applied this standard prospectively, where applicable, and, therefore, prior periods presented were not adjusted.

Effective October 1, 2017, the Company adopted the accounting guidance in ASU No. 2017-04, "Simplifying the Test for Goodwill Impairment." This standard eliminates Step 2 from the goodwill impairment test. The Company will now recognize an impairment charge for the amount by which the carrying amount exceeds the reporting unit's fair value. Implementation of this standard did not have a material effect on the consolidated financial statements and related

disclosures.
(b) New Accounting Requirements and Disclosures
In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU No. 2014-09, "Revenue from Contracts with Customers." The ASU will supersede most of the existing revenue recognition requirements in U.S. GAAP and will require entities to recognize revenue at an amount that reflects the consideration to which the Company expects to be entitled in exchange for transferring goods or services to a customer. The new standard also requires significantly expanded disclosures regarding the qualitative and quantitative information of an entity's nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers.
In August 2015, the FASB issued ASU No. 2015-14, which deferred the effective date by one year to annual reporting periods beginning after December 15, 2017, including interim periods within that reporting period. In March 2016, the FASB issued ASU No. 2016-08, which improves the operability and understandability of the implementation guidance on principal versus agent considerations. In April 2016, the FASB issued ASU No. 2016-10, which clarifies identifying performance

obligations and the licensing implementation guidance. In May 2016, the FASB issued ASU No. 2016-11, which rescinds certain SEC Staff Observer comments that are codified in Topic 605, Revenue Recognition, effective upon adoption of ASU 2014-09, and ASU No. 2016-12, which reduces the potential for diversity in practice at initial application and reduces the cost and complexity of applying Topic 606 both at transition and on an ongoing basis. In December 2016, the FASB issued ASU No. 2016-20, which provides technical corrections and improvements to the original guidance issued.

In 2017, the Company formed a project team to evaluate the new revenue recognition standard. The team has identified the relevant revenue streams and documented the procedures and control changes required to address the impacts that ASU 2014-09 may have on its business, as well as trained appropriate personnel on the procedures and controls going into effect January 1, 2018. The evaluation efforts included identifying revenue streams with similar contract structures, performing a detailed review of key contracts by revenue stream, and comparing historical policies and practices to the new standard. From the analysis performed, two main revenue streams were identified from contracts with customers: (1) product sales and (2) services. The Company's revenue recognition methodology does not materially change by the adoption of the new standard for product sales (point in time revenue recognition) and for service contracts (over time), which principally charge on a day rate basis and are primarily short-term in nature. Therefore, based on the assessment, the Company does not expect the adoption of this ASU to have a material impact on its consolidated financial statements. The Company will adopt the new standard effective January 1, 2018, using the full retrospective method.

In February 2016, the FASB issued ASU No. 2016-02, "Leases." This standard requires the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases under previous U.S. GAAP. The pronouncement is effective for annual reporting periods beginning after December 15, 2018, including interim periods within that reporting period and should be applied using a modified retrospective transition approach, with early application permitted. The Company is currently evaluating the impact the pronouncement will have on the consolidated financial statements and related disclosures.

In June 2016, the FASB issued ASU No. 2016-13, "Measurement of Credit Losses on Financial Instruments." This standard replaces the incurred loss impairment methodology in current U.S. GAAP with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. The pronouncement is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years, with early adoption permitted for the fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. The Company is currently evaluating the impact the pronouncement will have on the consolidated financial statements and related disclosures.

In August 2016, the FASB issued ASU No. 2016-15, "Classification of Certain Cash Receipts and Cash Payments." This standard addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice. The pronouncement is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years, with early adoption permitted. The Company is currently evaluating the impact the pronouncement will have on the consolidated financial statements and related disclosures.

In January 2017, the FASB issued ASU No. 2017-01, "Clarifying the Definition of a Business." This standard provides additional guidance on whether an integrated set of assets and activities constitutes a business. The pronouncement is effective for annual periods beginning after December 15, 2017, including interim periods within those periods, with early adoption permitted in specific instances. The Company is currently evaluating the impact the pronouncement will have on the consolidated financial statements and related disclosures.

In May 2017, the FASB issued ASU No. 2017-09, "Scope of Modification Accounting." This standard provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting under Topic 718. The pronouncement is effective for annual periods beginning after December 15, 2017, including interim periods within those periods, with early adoption permitted. The Company is currently evaluating the impact the pronouncement will have on the consolidated financial statements and related disclosures.

Note 3 — Discontinued Operations

During the fourth quarter 2016, the Company initiated a strategic restructuring of its business to enable a greater focus on its core businesses in energy chemistry and consumer and industrial chemistry. The Company executed a plan to sell or otherwise dispose of the Drilling Technologies and Production Technologies segments. An investment banking advisory

services firm was engaged and actively marketed these segments.

The Company met all of the criteria to classify the Drilling Technologies and Production Technologies segments' assets and liabilities as held for sale in the fourth quarter 2016. The Company has classified the assets, liabilities, and results of

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operations for these two segments as "Discontinued Operations" for all periods presented.
Disposal of the Drilling Technologies and Production Technologies reporting segments represented a strategic shift that would have a major effect on the Company's operations and financial results.
On December 30, 2016, the Company sold a portion of its Drilling Technologies segment and recorded a loss of $1.2 million which is included in the loss from discontinued operations for the year ended December 31, 2016.
On May 22, 2017, the Company completed the sale of substantially all of the assets and transfer of certain specified liabilities and obligations of the Company's Drilling Technologies segment to National Oilwell Varco, L.P. ("NOV") for $17.0 million in cash consideration, subject to normal working capital adjustments, with $1.5 million held back by NOV for up to 18 months to satisfy potential indemnification claims.

On May 23, 2017, the Company completed the sale of substantially all of the assets and transfer of certain specified liabilities and obligations of the Company's Production Technologies segment to Raptor Lift Solutions, LLC ("Raptor Lift") for $2.9 million in cash consideration, with $0.4 million held back by Raptor Lift to satisfy potential indemnification claims.
On August 16, 2017, the Company completed the sale of substantially all of the remaining assets of the Company's Drilling Technologies segment to Galleon Mining Tools, Inc. for $1.0 million in cash consideration and a note receivable of $1.0 million due in one year.
The sale or disposal of the assets and transfer or liquidation of liabilities and obligations of these segments was completed in 2017. The Company has no continuing involvement with the discontinued operations.

The following summarized financial information has been segregated from continuing operations and reported as Discontinued Operations for the years ended December 31, 2017, 2016, and 2015 (in thousands):

	Drilling Technologies			Production Technologies		
	2017	2016	2015	2017	2016	2015
Discontinued operations:						
Revenue	$11,534	$27,627	$52,112	$4,002	$8,292	$12,281
Cost of revenue	(7,309)	(18,667)	(35,410)	(3,236)	(7,881)	(10,179)
Selling, general and administrative	(6,963)	(15,285)	(21,049)	(1,759)	(3,790)	(4,158)
Depreciation and amortization	—	(1,714)	(3,240)	—	(584)	(658)
Research and development	(5)	(64)	(202)	(364)	(888)	(596)
Gain (loss) on disposal of long-lived assets	97	103	17	—	(50)	3
Impairment of inventory and long-lived assets	—	(36,522)	(19,568)	—	(3,913)	(804)
Loss from operations	(2,646)	(44,522)	(27,340)	(1,357)	(8,814)	(4,111)
Other expense	(96)	(412)	(259)	(52)	(96)	(40)
Loss on sale of businesses	(1,600)	(1,199)	—	(479)	—	—
Loss on write-down of assets held for sale	(6,831)	(18,971)	—	(9,718)	(6,161)	—
Loss before income taxes	(11,173)	(65,104)	(27,599)	(11,606)	(15,071)	(4,151)
Income tax benefit	4,138	23,661	9,675	4,299	5,477	1,455
Net loss from discontinued operations	$(7,035)	$(41,443)	$(17,924)	$(7,307)	$(9,594)	$(2,696)

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The assets and liabilities held for sale on the Consolidated Balance Sheets as of December 31, 2017 and 2016 are as follows (in thousands):

	Drilling Technologies		Production Technologies	
	December 31, 2017	December 31, 2016	December 31, 2017	December 31, 2016
Assets:				
Accounts receivable, net	$ —	$ 5,072	$ —	$ 1,784
Inventories	—	9,078	—	8,115
Other current assets	—	278	—	370
Long-term receivable	—	—	—	4,179
Property and equipment, net	—	11,277	—	3,978
Goodwill	—	15,333	—	1,689
Other intangible assets, net	—	7,395	—	484
Assets held for sale	—	48,433	—	20,599
Valuation allowance	—	(18,971)	—	(6,161)
Assets held for sale, net	$ —	$ 29,462	$ —	$ 14,438
Liabilities:				
Accounts payable	$ —	$ 2,472	$ —	$ 914
Accrued liabilities	—	1,190	—	385
Liabilities held for sale	$ —	$ 3,662	$ —	$ 1,299

At December 31, 2017, all remaining assets and liabilities of the discontinued operations were assumed by the Company's continuing operations. These balances included $0.3 million of net accounts receivable, $1.4 million of sales price hold-back that will be received during 2018, and $1.4 million of accrued liabilities to be settled in 2018.

Note 4 — Impairment of Inventory and Long-Lived Assets for Discontinued Operations

During the three months ended March 31, 2016, as a result of changes in the oil and gas industry that occurred since the beginning of 2016 and the corresponding impact on the Company's business outlook, the Company evaluated the direction of its business activities. Crude oil prices, which appeared to have stabilized during the fourth quarter of 2015, fell further during the first quarter of 2016, decreasing approximately 21% from average prices seen in the fourth quarter of 2015. The U.S. drilling rig count declined from 698 at December 31, 2015 to 450 at April 1, 2016, a decline of 35.5%.

Due to the decreased rig activity and its impact on management's expectations for future market activity, the Company further refocused operations of its Drilling Technologies segment. The Company decided to exit the business of building and repairing motors in all domestic markets. In addition, changes in drilling technique, including further escalation of the move to a dominance of pad drilling, reduced the marketability of certain other inventory items. The focus of the Production Technologies segment shifted to its new technologies for electric submersible pumps for the oil and gas industry and for hydraulic pumping units. Inventory

associated with older technologies for these items has been evaluated for impairment. As a result of these changes in focus and projected declines in asset utilization, the Company recorded a pre-tax impairment of inventories as noted below.

Changes in the business climate noted above and increasing operating losses experienced within the Drilling Technologies and Production Technologies segments during the three months ended March 31, 2016, caused the Company to test asset groups within these two segments for recoverability. Recoverability of the carrying amount of the asset groups was based upon estimated future cash flows while taking into consideration various assumptions and estimates, including future use of the assets, remaining useful life of the assets, and eventual disposition of the assets.

Undiscounted estimated cash flows of two asset groups associated with domestic operations in the Drilling Technologies segment did not exceed the carrying amount of the respective asset groups. Therefore, the Company performed an analysis of discounted future cash flows to determine the fair value of each of these two asset groups. As a result of this testing, the Company recorded a pre-tax impairment of long-lived assets as noted below.

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In addition, during the three months ended June 30, 2015, as a result of decreased rig activity and its impact on management's expectations for future market activity, the Company refocused the Drilling Technologies segment to businesses and markets that had the best opportunity for profitable growth in the future. In addition, the Company

shifted the focus of the Production Technologies segment to oil production markets and away from coal bed methane markets. As a result of these changes in focus and projected declines in asset utilization, the Company recorded pre-tax impairment charges as noted below.

The Company recorded impairment charges during the three months ended March 31, 2016 and June 30, 2015, as follows (in thousands):

	Three months ended	
	March 31, 2016	June 30, 2015
Drilling Technologies:		
Inventories	$12,653	$17,241
Long-lived assets:		
Property and equipment	14,642	2,327
Intangible assets other than goodwill	9,227	—
Production Technologies:		
Inventories	3,913	804
Total impairment	$40,435	$20,372

Based on the changes in the business climate discussed above and continuing operating losses experienced during the three months ended March 31, 2016, June 30, 2016, September 30, 2016, and December 31, 2016, goodwill within the Teledrift and Production Technologies reporting units was tested for impairment. However, no impairments of goodwill were recorded based upon this testing.

Note 5 — Acquisitions

On July 27, 2016, the Company acquired 100% of the stock and interests in International Polymerics, Inc. ("IPI") and related entities for $7.9 million in cash consideration, net of cash acquired, and 247,764 shares of the Company's common stock. IPI is a U.S. based manufacturer of high viscosity guar gum and guar slurry for the oil and gas industry with a wide selection of stimulation chemicals.

On January 27, 2015, the Company acquired 100% of the assets of International Artificial Lift, LLC ("IAL") for $1.3 million in cash consideration and 60,024 shares of the Company's common stock. IAL, a development-stage company at acquisition, specializes in the design, manufacturing and service of next-generation hydraulic pumping units that serve to increase and maximize production for oil and natural gas wells. The assets, liabilities, and results of operations of IAL are included in discontinued operations.

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Note 6 — Supplemental Cash Flow Information
Supplemental cash flow information is as follows (in thousands):

	Year ended December 31,		
	2017	2016	2015
Supplemental non-cash investing and financing activities:			
Value of common stock issued in acquisitions	$—	$3,268	$1,014
Value of common stock issued in payment of accrued liability	188	—	—
Exercise of stock options by common stock surrender	5,863	50	1,332
Supplemental cash payment information:			
Interest paid	$1,851	$2,024	$1,398
Income taxes (received, net of payments) paid, net of refunds	(10,195)	333	1,547

Note 7 — Revenue
The Company differentiates revenue and cost of revenue (excluding depreciation and amortization) based on whether the source of revenue is attributable to products or services. Revenue and cost of revenue (excluding depreciation and amortization) by source are as follows (in thousands):

	Year ended December 31,		
	2017	2016	2015
Revenue:			
Products	$310,716	$256,263	$258,968
Services	6,382	6,569	10,998
	$317,098	$262,832	$269,966
Cost of revenue (excluding depreciation and amortization):			
Products	$210,281	$162,488	$164,837
Services	4,848	7,767	7,196
	$215,129	$170,255	$172,033

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Note 8 — Inventories

Inventories are as follows (in thousands):

	December 31,	
	2017	2016
Raw materials	$42,682	$28,626
Work-in-process	3,284	2,918
Finished goods	29,793	26,739
Inventories	$75,759	$58,283

Changes in the reserve for excess and obsolete inventory are as follows (in thousands):

	2017	2016	2015
Balance, beginning of year	$ —	$ —	$ —
Charged to costs and expenses	724	1,301	16
Deductions	(724)	(1,301)	(16)
Balance, end of the year	$ —	$ —	$ —

During the years ended December 31, 2017, 2016, and 2015, all inventory items identified as excess and obsolete inventory were charged to costs and expenses.

Note 9 — Property and Equipment

Property and equipment are as follows (in thousands):

	December 31	
	2017	2016
Land	$6,724	$5,837
Buildings and leasehold improvements	43,899	42,986
Machinery and equipment	41,548	36,187
Fixed assets in progress	4,298	3,235
Furniture and fixtures	2,002	1,969
Transportation equipment	2,200	3,059
Computer equipment and software	12,181	11,844
Property and equipment	112,852	105,117
Less accumulated depreciation	(39,019)	(30,426)
Property and equipment, net	$73,833	$74,691

Depreciation expense totaled $9.5 million, $7.6 million, and $5.8 million for the years ended December 31, 2017, 2016, and 2015, respectively.

During the years ended December 31, 2017, 2016, and 2015, no impairments were recognized related to property and equipment.

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Note 10 — Goodwill

The Company has two reporting units, Energy Chemistry Technologies and Consumer and Industrial Chemistry Technologies, which have existing goodwill balances at December 31, 2017.

Goodwill is tested for impairment annually in the fourth quarter, or more frequently if circumstances indicate a potential impairment. During the fourth quarter of 2017, the Company adopted ASU 2017-04, which eliminates Step 2 from the goodwill impairment test. If the carrying amount exceeds the reporting unit's fair value, the Company will now recognize an impairment charge for the excess amount. During annual goodwill impairment testing for the year ended December 31, 2017, the Company first assessed the qualitative factors and was unable to conclude that it was not more likely than not that fair value of the Energy Chemistry Technologies and Consumer and Industrial Chemistry Technologies reporting units exceeded the carrying amount of the respective reporting units. Therefore, the Company performed the quantitative impairment test for both reporting units. The result of this testing indicated that the fair value of the Energy Chemistry Technologies and Consumer and Industrial Chemistry Technologies reporting units exceeded the carrying amount, including goodwill, of the respective reporting units.

During annual goodwill impairment testing for the year ended December 31, 2016, the Company first assessed qualitative factors to determine whether it was necessary to perform the two-step goodwill impairment test that the Company has historically used. The Company concluded that it was not more likely than not that goodwill was impaired as of the fourth quarter of 2016, and therefore, further testing was not required.

During annual goodwill impairment testing for the year ended December 31, 2015, the Company assessed the qualitative factors and concluded it was not more likely than not that there was an impairment of goodwill for the Consumer and Industrial Chemistry Technologies reporting unit. However, the Company was not able to conclude that it was not more likely than not that fair value of the Energy Chemistry Technologies reporting unit exceeded its carrying amount. Therefore, the Company performed the Step 1 impairment test for this reporting unit. The result of the Step 1 test indicated that the fair value of the Energy Chemistry Technologies reporting unit exceeded its carrying amount. Therefore, no further testing was required for this reporting unit.

No impairments of goodwill were recognized during the years ended December 31, 2017, 2016, and 2015.

Changes in the carrying amount of goodwill for each reporting unit are as follows (in thousands):

	Energy Chemistry Technologies	Consumer and Industrial Chemistry Technologies	Total
Balance at December 31, 2015:			
Goodwill	$ 36,318	$ 19,480	$55,798
Accumulated impairment losses	—	—	—
Goodwill balance, net	36,318	19,480	55,798
Activity during the year 2016:			
Goodwill impairment recognized	—	—	—
Acquisition goodwill recognized	862	—	862
Balance at December 31, 2016:			
Goodwill	37,180	19,480	56,660
Accumulated impairment losses	—	—	—
Goodwill balance, net	37,180	19,480	56,660
Activity during the year 2017:			
Goodwill impairment recognized	—	—	—
Acquisition goodwill recognized	—	—	—
Balance at December 31, 2017:			
Goodwill	37,180	19,480	56,660

Accumulated impairment losses	—	—	—
Goodwill balance, net	$ 37,180	$ 19,480	$56,660

FLOTEK INDUSTRIES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 11 — Other Intangible Assets
Other intangible assets are as follows (in thousands):

	December 31, 2017		2016	
	Cost	Accumulated Amortization	Cost	Accumulated Amortization
Finite lived intangible assets:				
Patents and technology	$17,310	$ 5,586	$16,815	$ 4,537
Customer lists	30,877	8,127	30,877	6,518
Trademarks and brand names	1,549	1,117	1,467	1,069
Total finite lived intangible assets acquired	49,736	14,830	49,159	12,124
Deferred financing costs	1,791	96	1,804	117
Total amortizable intangible assets	51,527	$ 14,926	50,963	$ 12,241
Indefinite lived intangible assets:				
Trademarks and brand names	11,630		11,630	
Total other intangible assets	$63,157		$62,593	
Carrying amount:				
Other intangible assets, net	$48,231		$50,352	

Intangible assets acquired are amortized on a straight-line basis over two to 20 years. Amortization of intangible assets acquired totaled $2.7 million, $2.8 million, and $3.0 million for the years end ended December 31, 2017, 2016, and 2015, respectively.

Amortization of deferred financing costs totaled $0.5 million, $0.4 million, and $0.3 million for the years ended December 31, 2017, 2016, and 2015, respectively.

Estimated future amortization expense for other finite lived intangible assets, including deferred financing costs, at December 31, 2017 is as follows (in thousands):

Year ending December 31,	
2018	$3,017
2019	2,956
2020	2,929
2021	2,916
2022	2,664
Thereafter	22,119
Other amortizable intangible assets, net	$36,601

During the years ended December 31, 2017, 2016, and 2015, no impairments were recognized related to other intangible assets.

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Note 12 — Long-Term Debt and Credit Facility
Long-term debt is as follows (in thousands):

	December 31,	
	2017	2016
Long-term debt:		
Borrowings under revolving credit facility	$27,950	$38,566
Term loan	—	9,833
Total long-term debt	27,950	48,399
Less current portion of long-term debt	(27,950)	(40,566)
Long-term debt, less current portion	$—	$7,833

Credit Facility
On May 10, 2013, the Company and certain of its subsidiaries (the "Borrowers") entered into an Amended and Restated Revolving Credit, Term Loan and Security Agreement (the "Credit Facility") with PNC Bank, National Association ("PNC Bank"). The Company may borrow under the Credit Facility for working capital, permitted acquisitions, capital expenditures and other corporate purposes. The Credit Facility, as amended, continues in effect until May 10, 2022. Under terms of the Credit Facility, as amended, the Company has total borrowing availability of $75 million under a revolving credit facility. A term loan has been repaid in May 2017 and may not be re-borrowed.
The Credit Facility is secured by substantially all of the Company's domestic real and personal property, including accounts receivable, inventory, land, buildings, equipment and other intangible assets. The Credit Facility contains customary representations, warranties, and both affirmative and negative covenants. In the event of default, PNC Bank may accelerate the maturity date of any outstanding amounts borrowed under the Credit Facility.
The Credit Facility contains financial covenants to maintain a fixed charge coverage ratio and a leverage ratio, as well as establishes an annual limit on capital expenditures. The fixed charge coverage ratio is the ratio of (a) earnings before interest, taxes, depreciation, and amortization ("EBITDA"), adjusted for non-cash stock-based compensation and the loss from discontinued operations, less cash taxes paid during the period to (b) all debt payments during the period. The fixed charge coverage ratio requirement began for the quarter ended March 31, 2017 at 1.00 to 1.00 and increased to 1.10 to 1.00 for the year ended December 31, 2017, and for each fiscal quarter thereafter. The leverage ratio (funded debt to adjusted EBITDA) requirement began for the six months ended June 30, 2017 at not greater than 5.50 to 1.00 and reduces to not greater than 3.00 to 1.00 for the year ending September 30, 2018, and thereafter. The annual limit on capital expenditures for 2017 was $20 million. The annual limit on capital expenditures for 2018 and each fiscal year thereafter is $26

million. The annual limit on capital expenditures is reduced if the undrawn availability under the revolving credit facility falls below $15 million at any month-end.
The Credit Facility restricts the payment of cash dividends on common stock and limits the amount that may be used to repurchase common stock and preferred stock.
Beginning with fiscal year 2017, the Credit Facility includes a provision that 25% of EBITDA minus cash paid for taxes, dividends, debt payments, and unfunded capital expenditures, not to exceed $3.0 million for any year, be paid on the outstanding balance within 75 days of the fiscal year end. For the year ended December 31, 2017, there was no additional payment required based on this provision.
Each of the Company's domestic subsidiaries is fully obligated for Credit Facility indebtedness as a borrower or as a guarantor.
(a) Revolving Credit Facility
Under the revolving credit facility, the Company may borrow up to $75 million through May 10, 2022. This includes a sublimit of $10 million that may be used for letters of credit. The revolving credit facility is secured by substantially all of the Company's domestic accounts receivable and inventory.

At December 31, 2017, eligible accounts receivable and inventory securing the revolving credit facility provided total borrowing capacity of $71.9 million under the revolving credit facility. Available borrowing capacity, net of outstanding borrowings, was $43.9 million at December 31, 2017.

The interest rate on advances under the revolving credit facility varies based on the fixed charge coverage ratio. Rates range (a) between PNC Bank's base lending rate plus 1.5% to 2.0% or (b) between the London Interbank Offered Rate (LIBOR) plus 2.5% to 3.0%. PNC Bank's base lending rate was 4.5% at December 31, 2017. The Company is required to pay a monthly facility fee of 0.25% per annum on any unused amount under the commitment based on daily averages. At December 31, 2017, $28.0 million was outstanding under the

FLOTEK INDUSTRIES, INC.
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revolving credit facility, with $6.0 million borrowed as base rate loans at an interest rate of 6.0% and $22.0 million borrowed as LIBOR loans at an interest rate of 4.07%.

Borrowing under the revolving credit facility is classified as current debt as a result of the required lockbox arrangement and the subjective acceleration clause.

(b) Term Loan

The amount borrowed under the term loan was reset to $10 million effective as of September 30, 2016. Monthly principal

payments of $0.2 million were required. On May 22, 2017, the Company repaid the outstanding balance of the term loan. The term loan may not be re-borrowed.

Debt Maturities

At December 31, 2017, borrowing under the revolving credit facility, which matures on May 10, 2022, is classified a current debt, and therefore, the entire balance is considered to mature in 2018.

Note 13 — Fair Value Measurements

Fair value is defined as the amount that would be received for selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Company categorizes financial assets and liabilities into the three levels of the fair value hierarchy. The hierarchy prioritizes the inputs to valuation techniques used to measure fair value and bases categorization within the hierarchy on the lowest level of input that is available and significant to the fair value measurement.

- Level 1 — Quoted prices in active markets for identical assets or liabilities;
- Level 2 — Observable inputs other than Level 1, such as quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3 — Significant unobservable inputs that are supported by little or no market activity or that are based on the reporting entity’s assumptions about the inputs.

Liabilities Measured at Fair Value on a Recurring Basis

At December 31, 2017 and 2016, no liabilities were required to be measured at fair value on a recurring basis. There were no transfers in or out of either Level 1, Level 2, or Level 3 fair value measurements during the years ended December 31, 2017, 2016, and 2015.

Assets Measured at Fair Value on a Nonrecurring Basis

The Company’s non-financial assets, including property and equipment, goodwill, and other intangible assets are measured at fair value on a non-recurring basis and are subject to fair value adjustment in certain circumstances. No impairment of any of these assets was recognized during the years ended December 31, 2017, 2016, and 2015.

Fair Value of Other Financial Instruments

The carrying amounts of certain financial instruments, including cash and cash equivalents, accounts receivable, accounts payable and accrued expenses, approximate fair value due to the short-term nature of these accounts. The Company had no cash equivalents at December 31, 2017 or 2016.

The carrying amount and estimated fair value of the Company’s long-term debt are as follows (in thousands):

	December 31,			
	2017		2016	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Borrowings under revolving credit facility	$27,950	$27,950	$38,566	$38,566
Term loan	—	—	9,833	9,833

The carrying amount of borrowings under the revolving credit facility and the term loan approximate their fair value because the interest rate is variable.

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Note 14 — Earnings (Loss) Per Share
Basic earnings (loss) per common share is calculated by dividing net income (loss) by the weighted average number of common shares outstanding for the period. Diluted earnings (loss) per common share is calculated by dividing net income (loss) by the weighted average number of common shares outstanding combined with dilutive common share equivalents outstanding, if the effect is dilutive.

Potentially dilutive securities were excluded from the calculation of diluted loss per share for the year ended December 31, 2017, since including them would have an anti-dilutive effect on loss per share due to the loss from continuing operations incurred during the period. Securities convertible into shares of common stock that were not considered in the diluted loss per share calculations were 0.7 million stock options, before they were converted into common shares during 2017, and 0.7 million restricted stock units.

Basic and diluted earnings (loss) per common share are as follows (in thousands, except per share data):

	Year ended December 31,		
	2017	2016	2015
(Loss) income from continuing operations	$(13,053)	$1,907	$7,158
Loss from discontinued operations, net of tax	(14,342)	(51,037)	(20,620)
Net loss - Basic and Diluted	$(27,395)	$(49,130)	$(13,462)
Weighted average common shares outstanding - Basic	57,580	56,087	54,459
Assumed conversions:			
Incremental common shares from stock options	—	197	527
Incremental common shares from restricted stock units	—	66	6
Weighted average common shares outstanding - Diluted	57,580	56,350	54,992
Basic earnings (loss) per common share:			
Continuing operations	$(0.23)	$0.03	$0.13
Discontinued operations, net of tax	(0.25)	(0.91)	(0.38)
Basic earnings (loss) per common share	$(0.48)	$(0.88)	$(0.25)
Diluted earnings (loss) per common share:			
Continuing operations	$(0.23)	$0.03	$0.13
Discontinued operations, net of tax	(0.25)	(0.91)	(0.37)
Diluted earnings (loss) per common share	$(0.48)	$(0.88)	$(0.24)

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Note 15 — Income Taxes

Components of the income tax expense are as follows (in thousands):

	Year ended December 31,		
	2017	2016	2015
Current:			
Federal	$(1,314)	$442	$3,944
State	675	(85)	390
Foreign	488	(526)	1,841
Total current	(151)	(169)	6,175
Deferred:			
Federal	8,701	1,564	(2,628)
State	337	(112)	(63)
Foreign	(45)	(46)	(8)
Total deferred	8,993	1,406	(2,699)
Income tax expense	$8,842	$1,237	$3,476

The components of (loss) income before income taxes are as follows (in thousands):

	Year ended December 31,		
	2017	2016	2015
United States	$(2,844)	$4,502	$4,760
Foreign	(1,367)	(1,358)	5,874
(Loss) income before income taxes	$(4,211)	$3,144	$10,634

A reconciliation of the U.S. federal statutory tax rate to the effective income tax rate is as follows:

	Year ended December 31,		
	2017	2016	2015
Federal statutory tax rate	(35.0)%	35.0 %	35.0 %
State income taxes, net of federal benefit	14.2	(5.3)	2.0
Non-U.S. income taxed at different rates	11.6	1.2	(4.4)
Impact of 2017 Tax Cuts and Jobs Act	173.6	—	—
Net operating loss carryback adjustment	—	10.0	1.4
Reduction in tax benefit related to stock-based awards	47.2	—	—
Non-deductible expenditures	11.0	13.1	5.9
Research and development credit	(10.8)	(12.7)	(3.5)
Other	(1.8)	(2.0)	(3.7)
Effective income tax rate	210.0 %	39.3 %	32.7 %

Fluctuations in effective tax rates have historically been impacted by permanent tax differences with no associated income tax impact, changes in state apportionment factors, including the effect on state deferred tax assets and liabilities, and non-U.S. income taxed at different rates. Changes in the effective tax rate during 2017 included the Company implementing ASU No. 2016-09, which requires accounting for excess tax benefits and tax deficiencies related to stock-based awards as discrete items in the period in which they occur and the impact of the 2017 Tax Cuts and Jobs Act.

Comprehensive tax reform legislation enacted in December 2017, commonly referred to as the Tax Cuts and Jobs Acts (“2017 Tax Act”), makes significant changes to U.S. federal income tax laws. The 2017 Tax Act, among other things, reduces the corporate income tax rate from 35% to 21%, partially limits the deductibility of business interest expense and net operating losses, provides additional limitations on the deductibility of executive compensation, imposes a one-time tax on unrepatriated earnings from certain foreign subsidiaries, taxes offshore earnings at reduced rates regardless of whether they are repatriated, and allows the immediate deduction of certain new investments instead of deductions for depreciation expense over time. The Company has not completed its determination of the 2017 Tax Act and recorded provisional amounts in its financial statements as of December 31,

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2017. The Company recorded a provisional expense for the effects of the 2017 Tax Act of $7.3 million. The effects of the 2017 Tax Act on the Company include three main categories: 1) remeasurement of the net deferred tax assets from 35% to 21%, which resulted in tax expense of $5.5 million; 2) a one-time tax on unrepatriated earnings from certain foreign subsidiaries of $0.2 million; and 3) additional limitations on the deductibility of executive compensation, which resulted in tax expense of $1.6 million. The Company will continue to evaluate the 2017 Tax Act and adjust the provisional amounts as additional information is obtained. The ultimate impact of the 2017 Tax Act may differ from the provisional amounts recorded due to additional information becoming available, changes in interpretation of the 2017 Tax Act, and additional regulatory guidance that may be issued.

Deferred income taxes reflect the tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the value reported for income tax purposes, at the enacted tax rates expected to be in effect when the differences reverse. The components of deferred tax assets and liabilities are as follows (in thousands):

	December 31,	
	2017	2016
Deferred tax assets:		
Net operating loss carryforwards	$24,569	$21,212
Allowance for doubtful accounts	981	1,582
Inventory valuation reserves	827	2,205
Equity compensation	685	3,161
Goodwill	—	10,788
Accrued compensation	222	80
Foreign tax credit carryforward	3,955	2,365
Other	—	76
Total gross deferred tax assets	31,239	41,469
Valuation allowance	(1,187)	(1,053)
Total deferred tax assets, net	30,052	40,416
Deferred tax liabilities:		
Property and equipment	(6,216)	(7,264)
Intangible assets	(10,084)	(13,375)
Goodwill	(365)	—
Convertible debt	(619)	(2,010)
Unearned revenue	(52)	(4,535)
Prepaid insurance and other	(3)	(338)
Total gross deferred tax liabilities	(17,339)	(27,522)
Net deferred tax assets	$12,713	$12,894

As of December 31, 2017, the Company had U.S. net operating loss carryforwards of $103.8 million, expiring in various amounts in 2029 through 2036. The ability to utilize net operating losses and other tax attributes could be subject to a significant limitation if the Company were to undergo an “ownership change” for purposes of Section 382 of the Tax Code.

During 2015, the Company’s corporate organizational structure required the filing of two separate consolidated U.S. Federal income tax returns. Taxable income of one group (“Group A”) could not be offset by tax attributes, including net operating losses of the other group (“Group B”). During the year ended December 31, 2015, the Company restructured its legal entities such that there is only one U.S. tax filing group filing a single U.S. consolidated federal income tax return beginning in 2016.

The Company considers all available evidence, both positive and negative, to determine whether a valuation allowance is necessary for deferred tax assets. The Company considers cumulative losses in recent years as significant negative evidence. The Company considers recent years to mean the current year plus the two preceding years. No valuation allowance was recorded against the net federal deferred tax assets at December 31, 2017, based on the Company's determination of its objectively verifiable estimate of future income. In determining this objectively verifiable future income, the Company considered income from the most recent three years adjusted for certain nonrecurring items such as discontinued operations and stock compensation that will be nondeductible under the 2017 Tax Act beginning in 2018. As of December 31, 2017, the Company maintains a valuation allowance of $1.2 million for deferred tax assets in certain state jurisdictions.

The Company has not calculated U.S. taxes on unremitted earnings of certain non-U.S. subsidiaries due to the Company's intent to reinvest the unremitted earnings of the non-U.S. subsidiaries. At December 31, 2017, the Company had approximately $1.5 million in unremitted earnings outside the U.S. which were not included for U.S. tax purposes. Due to the 2017 Tax Act, U.S. federal transition taxes have been recorded for a one-time U.S. tax liability on these earnings which have not previously been repatriated to the U.S. However, certain withholding taxes will need to be paid upon repatriation. It is not practicable to estimate the amount of the deferred tax liability on such unremitted earnings.

The Company has performed an evaluation and concluded there are no significant uncertain tax positions requiring recognition in the Company's financial statements. The evaluation was performed for the tax years which remain subject to examination by tax jurisdictions as of December 31, 2017, which are the years ended December 31, 2014 through December 31, 2017 for U.S. federal taxes and the years ended December 31, 2013 through December 31, 2017 for state tax jurisdictions.

At December 31, 2017, the Company had no unrecognized tax benefits.

In January 2017, the Internal Revenue Service notified the Company that it will examine the Company's federal tax returns for the year ended December 31, 2014. No adjustments have been asserted and management believes that sustained adjustments, if any, would not have a material effect on the Company's financial position, results of operations or liquidity.

Note 16 — Common Stock

The Company's Certificate of Incorporation, as amended November 9, 2009, authorizes the Company to issue up to 80 million shares of common stock, par value $0.0001 per share, and 100,000 shares of one or more series of preferred stock, par value $0.0001 per share.

A reconciliation of the changes in common shares issued is as follows:

	Year ended December 31,	
	2017	2016
Shares issued at the beginning of the year	59,684,669	56,220,214
Issued in sale of common stock	—	2,450,339
Issued in acquisition	—	247,764
Issued in payment of accrued liability	—	20,000
Issued as restricted stock award grants	275,029	632,240
Issued upon exercise of stock options	663,288	114,112
Shares issued at the end of the year	60,622,986	59,684,669

Stock-Based Incentive Plans

Stockholders approved long term incentive plans in 2014, 2010, and 2007 (the "2014 Plan," the "2010 Plan," and the "2007 Plan," respectively) under which the Company may grant equity awards to officers, key employees, non-employee directors, and service providers in the form of stock options, restricted stock, and certain other incentive awards. The maximum number of shares that may be issued under the 2014 Plan, 2010 Plan, and 2007 Plan are 5.2 million, 6.0 million, and 2.2 million, respectively. At December 31, 2017, the Company had a total of 0.3 million shares remaining to be granted under the 2014 Plan and 2010 Plan. Shares may no longer be granted under the 2007 Plan.

Stock Options

All stock options are granted with an exercise price equal to the market value of the Company's common stock on the date of grant. Options expire no later than ten years from the date of grant and generally vest in four years or less. Proceeds received from stock option exercises are credited to common stock and additional paid-in capital, as appropriate. The Company uses historical data to estimate pre-vesting option forfeitures. Estimates are adjusted when actual forfeitures differ from the estimate. Stock-based compensation expense is recorded for all equity awards expected to vest.

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The fair value of stock options at the date of grant is calculated using the Black-Scholes option pricing model. The risk free interest rate is based on the implied yield of U.S. Treasury zero-coupon securities that correspond to the expected life of the option. Volatility is estimated based on historical and implied volatilities of the Company's stock and of identified companies considered to be representative peers of the Company. The expected life of awards granted represents the period of time the options are expected to remain outstanding. The Company uses the "simplified" method which is permitted for companies that cannot reasonably estimate the expected life of options based on historical share option exercise experience. The Company does not expect to pay dividends

on common stock. No options were granted to employees during 2017, 2016, and 2015.

The Black-Scholes option valuation model was developed to estimate the fair value of traded options that have no vesting restrictions and are fully-transferable. Because option valuation models require the use of subjective assumptions, changes in these assumptions can materially affect the fair value calculation. The Company's options are not characteristic of traded options; therefore, the option valuation models do not necessarily provide a reliable measure of the fair value of options.

Stock option activity for the year ended December 31, 2017 is as follows:

Options	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding as of January 1, 2017	663,288	$ 8.87		
Exercised	(663,288)	8.87		
Forfeited	—	—		
Expired	—	—		
Outstanding as of December 31, 2017	—	$ —	0.00	$ —

The total intrinsic value of stock options exercised during the years ended December 31, 2017, 2016, and 2015 was $2.3 million, $1.0 million, and $8.4 million, respectively. No stock options vested during the years ended December 31, 2017, 2016, and 2015.

At December 31, 2017, the Company had no remaining outstanding stock options.

Restricted Stock

The Company grants employees either time-vesting or performance-based restricted shares in accordance with terms

specified in the Restricted Stock Agreements ("RSAs"). Time-vesting restricted shares vest after a stipulated period of time has elapsed subsequent to the date of grant, generally three years. Certain time-vested shares have also been issued with a portion of the shares granted vesting immediately. Performance-based restricted shares are issued with performance criteria defined over a designated performance period and vest only when, and if, the outlined performance criteria are met. During the year ended December 31, 2017, 100% of the restricted shares granted were time-vesting and none were performance-based. Grantees of restricted shares retain voting rights for the granted shares.

Restricted stock share activity for the year ended December 31, 2017 is as follows:

Restricted Stock Shares	Shares	Weighted-Average Fair Value at Date of Grant
Non-vested at January 1, 2017	683,242	$ 15.92

Granted to employees	260,029	10.62
Granted to service provider	15,000	9.34
Vested	(590,027)	14.63
Forfeited	(121,986)	17.48
Non-vested at December 31, 2017	246,258	$ 12.24

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The weighted-average grant-date fair value of restricted stock granted during the years ended December 31, 2017, 2016, and 2015 was $10.62, $11.92, and $16.15 per share, respectively. The total fair value of restricted stock that vested during the years ended December 31, 2017, 2016, and 2015 was $8.6 million, $15.4 million, and $13.7 million, respectively.

At December 31, 2017, there was $1.7 million of unrecognized compensation expense related to non-vested restricted stock. The unrecognized compensation expense is expected to be recognized over a weighted-average period of 0.9 years.

Restricted Stock Units

During the year ended December 31, 2017, the Company granted performance-based restricted stock units ("RSUs") for 604,682 shares equivalents. The performance period for these share equivalents continues until December 31, 2018. During the year ended December 31, 2016, the Company granted performance-based RSUs for 768,393 share equivalents, which had a performance period through December 31, 2017. RSUs earned, which will be converted to 252,405 RSAs in 2018, will vest on December 31, 2018.

Restricted stock unit share activity for the year ended December 31, 2017 is as follows:

Restricted Stock Unit Shares	Shares	Weighted-Average Fair Value at Date of Grant
RSU share equivalents at January 1, 2017	768,393	$ 12.02
2016 share equivalents forfeited	(263,585)	12.02
2016 share equivalents not earned	(252,403)	12.02
2016 share equivalents	252,405	12.02
2017 share equivalents granted	604,682	18.70
2017 share equivalents forfeited	(131,756)	18.48
RSU share equivalents at December 31, 2017	725,331	$ 16.41

At December 31, 2017, there was $8.5 million of unrecognized compensation expense related to 2017 and 2016 restricted stock units. The unrecognized compensation expense is expected to be recognized over a weighted-average period of 1.7 years.

Employee Stock Purchase Plan

The Company's Employee Stock Purchase Plan ("ESPP") was approved by stockholders on May 18, 2012. The Company registered 500,000 shares of its common stock, currently held as treasury shares, for issuance under the ESPP. The purpose of the ESPP is to provide employees with an opportunity to purchase shares of the Company's common stock through accumulated payroll deductions. The ESPP allows participants to purchase common stock at a purchase price equal to 85% of the fair market value of the common stock on the last business day of a three-month offering period which coincides with calendar quarters. Payroll deductions may not exceed 10% of an employee's compensation and participants may not purchase more than 1,000 shares in any one offering period. The fair value of the discount associated with shares purchased under the plan is recognized as share-based compensation expense and was $0.1 million, $0.1 million, and $0.2 million during the years ended December 31, 2017, 2016, and 2015, respectively. The total fair value of the shares purchased under the plan during the years ended December 31, 2017, 2016, and

2015 was $0.8 million, $1.0 million, and $1.0 million, respectively. The employee payment associated with participation in the plan was satisfied through payroll deductions.

Share-Based Compensation Expense

Non-cash share-based compensation expense related to restricted stock, restricted stock unit grants, and stock purchased under the Company's ESPP was $11.2 million, $12.1 million, and $13.1 million during the years ended December 31, 2017, 2016, and 2015, respectively.

Treasury Stock

The Company accounts for treasury stock using the cost method and includes treasury stock as a component of stockholders' equity. During the years ended December 31, 2017, 2016, and 2015, the Company purchased 199,644 shares, 238,216 shares, and 473,304 shares, respectively, of the Company's common stock at market value as payment of income tax withholding owed by employees upon the vesting of restricted shares and the exercise of stock options. Shares issued as restricted stock awards to employees that were forfeited are accounted for as treasury stock. During the years ended December 31, 2017, 2016, and 2015, shares surrendered for the exercise of stock options were 478,287, 3,225, and

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106,810, respectively. These surrendered shares are also accounted for as treasury stock.

Stock Repurchase Program

In November 2012, the Company's Board of Directors authorized the repurchase of up to $25 million of the Company's common stock. Repurchases may be made in the open market or through privately negotiated transactions. Through December 31, 2017, the Company has repurchased $25 million of its common stock under this authorization.

In June 2015, the Company's Board of Directors authorized the repurchase of up to an additional $50 million of the Company's common stock. Repurchases may be made in the open market or through privately negotiated transactions. Through December 31, 2017, the Company has repurchased $0.3 million of its common stock under this authorization.

During the year ended December 31, 2017, the Company repurchased 905,000 shares of its outstanding common stock on the open market at a cost of $5.2 million, inclusive of transaction costs, or an average price of $5.75 per share. During the year ended December 31, 2016, the Company did not repurchase any shares of its outstanding common stock. During the year ended December 31, 2015, the Company repurchased 799,723 shares of its outstanding common stock on the open market at a cost of $9.7 million, inclusive of transaction costs, or an average price of $12.13 per share.

At December 31, 2017, the Company has $49.7 million remaining under its share repurchase program. A covenant under the Company's Credit Facility limits the amount that may be used to repurchase the Company's common stock. At December 31, 2017, this covenant limits additional share repurchases to $9.7 million.

Note 17 — Commitments and Contingencies

Class Action Litigation

On March 30, 2017, the U.S. District Court for the Southern District of Texas granted the Company's motion to dismiss the four consolidated putative securities class action lawsuits that were filed in November 2015, against the Company and certain of its officers. The lawsuits were previously consolidated into a single case, and a consolidated amended complaint had been filed. The consolidated amended complaint asserted that the Company made false and/or misleading statements, as well as failed to disclose material adverse facts about the Company's business, operations, and prospects. The complaint sought an award of damages in an unspecified amount on behalf of a putative class consisting of persons who purchased the Company's common stock between October 23, 2014 and November 9, 2015, inclusive. The lead plaintiff appealed the District Court's decision granting the motion to dismiss.

In January 2016, three derivative lawsuits were filed, two in the District Court of Harris County, Texas (which have since been consolidated into one case), and one in the United States District Court for the Southern District of Texas, on behalf of the Company against certain of its officers and its current directors. The lawsuits allege violations of law, breaches of fiduciary duty, and unjust enrichment against the defendants.

The Company believes the lawsuits are without merit and intends to vigorously defend against all claims asserted. Discovery has not yet commenced. At this time, the Company is unable to reasonably estimate the outcome of this litigation.

In addition, as previously disclosed, the U.S. Securities and Exchange Commission had opened an inquiry related to similar issues to those raised in the above-described litigation. On August 21, 2017, the Company received a letter from the staff of the SEC stating that the inquiry has been concluded

and that the staff does not intend to recommend an enforcement action against the Company.

Other Litigation

The Company is subject to routine litigation and other claims that arise in the normal course of business. Management is not
aware of any pending or threatened lawsuits or proceedings that are expected to have a material effect on the Company's financial position, results of operations or liquidity.

Legal Settlement

In December 2016, the Company reached a settlement with a stockholder related to disgorgement of potential short-swing profits under Section 16(b) of the Securities Exchange Act of 1934 in connection with purchases and sales of Company securities. As a result of the settlement, the Company recorded a gain of $12.7 million.

Operating Lease Commitments

The Company has operating leases for office space, vehicles, and equipment. Future minimum lease payments under operating leases at December 31, 2017 are as follows (in thousands):

Year ending December 31,	Minimum Lease Payments
2018	$ 2,734
2019	2,434
2020	2,169
2021	1,973
2022	1,988
Thereafter	10,508
Total	$ 21,806

FLOTEK INDUSTRIES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Rent expense under operating leases totaled $2.9 million, $3.3 million, and $2.6 million during the years ended December 31, 2017, 2016, and 2015, respectively.

401(k) Retirement Plan

The Company maintains a 401(k) retirement plan for the benefit of eligible employees in the U.S. All employees are eligible to participate in the plan upon employment. On January 1, 2015, the Company implemented a new matching program. The Company matches contributions at 100% of up to 2% of an employee's compensation and, if greater, the Company matches contributions at 50% from 4% to 8% of an employee's compensation.

During the years ended December 31, 2017, 2016, and 2015, compensation expense included $1.0 million, $1.0 million and $1.0 million, respectively, related to the Company's 401(k) match.

Concentrations and Credit Risk

The majority of the Company's revenue is derived from the oil and gas industry. Customers include major oilfield services companies, major integrated oil and natural gas companies, independent oil and natural gas companies, pressure pumping service companies, and state-owned national oil companies. This concentration of customers in one industry increases credit and business risks.

The Company is subject to concentrations of credit risk within trade accounts receivable, as the Company does not generally require collateral as support for trade receivables. In addition, the majority of the Company's cash is maintained at a major financial institution and balances often exceed insurable amounts.

Note 18 — Business Segment, Geographic and Major Customer Information

Segment Information

Operating segments are defined as components of an enterprise for which separate financial information is available that is regularly evaluated by chief operating decision-makers in deciding how to allocate resources and assess performance. The operations of the Company are categorized into two reportable segments: Energy Chemistry Technologies and Consumer and Industrial Chemistry Technologies.

- Energy Chemistry Technologies designs, develops, manufactures, packages, and markets specialty chemistries used in oil and natural gas well drilling, cementing, completion, and stimulation. In addition, the Company's chemistries are used in specialized enhanced and improved oil recovery markets. Activities in this segment also include construction and management of automated material handling facilities and management of loading facilities and blending operations for oilfield services companies.

- Consumer and Industrial Chemistry Technologies designs, develops, and manufactures products that are sold to companies in the flavor and fragrance industry and the specialty chemical industry. These technologies are used by beverage and food companies, fragrance companies, and companies providing household and industrial cleaning products.

The Company evaluates performance based upon a variety of criteria. The primary financial measure is segment operating income. Various functions, including certain sales and marketing activities and general and administrative activities, are provided centrally by the corporate office. Costs associated with corporate office functions, other corporate income and expense items, and income taxes are not allocated to reportable segments.

FLOTEK INDUSTRIES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Summarized financial information of the reportable segments is as follows (in thousands):

As of and for the year ended December 31,	Energy Chemistry Technologies	Consumer and Industrial Chemistry Technologies	Corporate and Other	Total
2017				
Net revenue from external customers	$ 243,106	$ 73,992	$ —	$317,098
Income (loss) from operations	33,611	7,465	(43,931)	(2,855)
Depreciation and amortization	7,323	2,391	2,445	12,159
Capital expenditures	3,279	4,763	918	8,960
2016				
Net revenue from external customers	$ 188,233	$ 74,599	$ —	$262,832
Income (loss) from operations	29,014	9,664	(45,982)	(7,304)
Depreciation and amortization	5,935	2,257	2,237	10,429
Capital expenditures	10,674	888	2,398	13,960
2015				
Net revenue from external customers	$ 213,592	$ 56,374	$ —	$269,966
Income (loss) from operations	43,902	8,742	(40,366)	12,278
Depreciation and amortization	4,791	2,202	1,742	8,735
Capital expenditures	12,803	568	3,020	16,391

Assets of the Company by reportable segments are as follows (in thousands):

	December 31, 2017	December 31, 2016
Energy Chemistry Technologies	$ 177,797	$ 184,328
Consumer and Industrial Chemistry Technologies	116,600	98,105
Corporate and Other	35,491	56,882
Total segments	329,888	339,315
Held for sale	—	43,900
Total assets	$ 329,888	$ 383,215

Geographic Information

Revenue by country is based on the location where services are provided and products are used. No individual country other than the United States ("U.S.") accounted for more than 10% of revenue. Revenue by geographic location is as follows (in thousands):

	Year ended December 31,		
	2017	2016	2015
U.S.	$259,610	$210,890	$227,117
Other countries	57,488	51,942	42,849
Total	$317,098	$262,832	$269,966

Long-lived assets held in countries other than the U.S. are not considered material to the consolidated financial statements.

FLOTEK INDUSTRIES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Major Customers

Revenue from major customers, as a percentage of consolidated revenue, is as follows:

	Year ended December 31, 2017	2016	2015
Customer A	12.8%	15.7%	17.2%
Customer B	8.9%	13.2%	14.6%
Customer C	4.0%	6.9%	10.6%

Approximately 95% of the revenue from major customers noted above was from the Energy Chemistry Technologies segment.

Note 19 — Quarterly Financial Data (Unaudited)

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
	(in thousands, except per share data)				
2017					
Revenue [1]	$79,954	$85,177	$79,458	$72,509	$317,098
Income (loss) from operations [1]	(623)	(1,252)	(3,103)	2,123	(2,855)
Loss from continuing operations [1]	$(743)	$(1,122)	$(3,421)	$(7,767)	$(13,053)
Income (loss) from discontinued operations, net of tax	(11,235)	(2,704)	319	(722)	(14,342)
Net loss	$(11,978)	$(3,826)	$(3,102)	$(8,489)	$(27,395)
Basic earnings (loss) per common share [2]:					
Continuing operations	$(0.01)	$(0.02)	$(0.06)	$(0.14)	$(0.23)
Discontinued operations	(0.19)	(0.05)	0.01	(0.01)	(0.25)
Basic earnings (loss) per common share	$(0.20)	$(0.07)	$(0.05)	$(0.15)	$(0.48)
Diluted earnings (loss) per common share [2]:					
Continuing operations	$(0.01)	$(0.02)	$(0.06)	$(0.14)	$(0.23)
Discontinued operations	(0.19)	(0.05)	0.01	(0.01)	(0.25)
Diluted earnings (loss) per common share	$(0.20)	$(0.07)	$(0.05)	$(0.15)	$(0.48)

(1) Amounts exclude impact of discontinued operations.
(2) The sum of the quarterly earnings (loss) per share (basic and diluted) may not agree to the earnings (loss) per share for the year due to the timing of common stock issuances.

FLOTEK INDUSTRIES, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
	(in thousands, except per share data)				
2016					
Revenue [1]	$63,812	$64,079	$64,337	$70,604	$262,832
Income (loss) from operations [1]	368	156	(2,253)	(5,575)	(7,304)
Income (loss) from continuing operations [1]	$(29)	$(111)	$(1,870)	$3,917	$1,907
Loss from discontinued operations, net of tax	(30,156)	(2,169)	(876)	(17,836)	(51,037)
Net loss	$(30,185)	$(2,280)	$(2,746)	$(13,919)	$(49,130)
Basic earnings (loss) per common share [2]:					
Continuing operations	$—	$—	$(0.03)	$0.07	$0.03
Discontinued operations	(0.55)	(0.04)	(0.02)	(0.31)	(0.91)
Basic earnings (loss) per common share	$(0.55)	$(0.04)	$(0.05)	$(0.24)	$(0.88)
Diluted earnings (loss) per common share [2]:					
Continuing operations	$—	$—	$(0.03)	$0.07	$0.03
Discontinued operations	(0.55)	(0.04)	(0.02)	(0.31)	(0.91)
Diluted earnings (loss) per common share	$(0.55)	$(0.04)	$(0.05)	$(0.24)	$(0.88)

(1) Amounts exclude impact of discontinued operations.
(2) The sum of the quarterly earnings (loss) per share (basic and diluted) may not agree to the earnings (loss) per share for the year due to the timing of common stock issuances.

Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.

As previously reported, effective November 16, 2017, Hein & Associates LLP ("Hein"), the independent registered public accounting firm for Flotek Industries, Inc. (the "Company"), combined with Moss Adams LLP ("Moss Adams"). As a result of this transaction, on November 16, 2017, Hein resigned as the independent registered public accounting firm for the Company. Concurrent with such resignation, the Company's audit committee approved the engagement of Moss Adams as the new independent registered public accounting firm for the Company.

The audit reports of Hein on the Company's financial statements for the years ended December 31, 2016 and 2015 did not contain an adverse opinion or a disclaimer of opinion, and were not qualified or modified as to uncertainty, audit scope or accounting principles.

During the two most recent fiscal years ended December 31, 2016 and through the subsequent interim period preceding Hein's resignation, there were no disagreements between the Company and Hein on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedures which, if not resolved to the satisfaction of Hein, would have caused them to make reference thereto in their reports on the Company's financial statements for such years. In addition, during the periods identified above, there were no reportable events within the meaning set forth in Item 304(a)(1)(v) of Regulation S-K.

During the two most recent fiscal years ended December 31, 2016 and through the subsequent interim period preceding Moss Adams' engagement, the Company did not consult with Moss Adams on either (1) the application of accounting principles to a specified transaction, either completed or proposed; or the type of audit opinion that may be rendered on the Company's financial statements, and Moss Adams did not provide either a written report or oral advice to the Company that Moss Adams concluded was an important factor considered by the Company in reaching a decision as to the accounting, auditing, or financial reporting issue; or (2) any matter that was either the subject of a disagreement, as defined in Item 304(a)(1)(iv) of Regulation S-K, or a reportable event, as defined in item

304(a)(1)(v) of Regulation S-K.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

The Company's disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in reports filed or submitted under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. The Company's disclosure controls and procedures are also designed to ensure such information is accumulated and communicated to management, including the principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosures. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of controls and procedures. Accordingly, even effective disclosure controls and procedures can only provide reasonable assurance that control objectives are attained. The Company's disclosure controls and procedures are designed to provide such reasonable assurance.

The Company's management, with the participation of the principal executive and principal financial officers, evaluated the effectiveness of the design and operation of the Company's disclosure controls and procedures as of December 31, 2017, as required by Rule 13a-15(e) of the Exchange Act. Based upon that evaluation, the principal executive and principal financial officers have concluded that the Company's disclosure controls and procedures were effective as of December 31, 2017.

Management's Report on Internal Control over Financial Reporting

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rule 13a-15(f) of the Exchange Act. The Company's management, including the principal executive and principal financial officers, assessed the effectiveness of internal control over financial reporting as of December 31, 2017, based on criteria issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 Framework) ("COSO") in Internal Control – Integrated Framework. Upon evaluation, the Company's management has concluded that the Company's internal control over financial reporting was effective in connection with the preparation of the consolidated financial statements as of December 31, 2017.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2017 has been audited by Moss Adams LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control over Financial Reporting

There have been no changes in the Company's system of internal control over financial reporting during the three months ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.
The information required by this Item is incorporated by reference to the Company’s Definitive Proxy Statement for the 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days of year end.

Item 11. Executive Compensation.
The information required by this Item is incorporated by reference to the Company’s Definitive Proxy Statement for the 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days of year end.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.
The information required by this Item is incorporated by reference to the Company’s Definitive Proxy Statement for the 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days of year end.

Item 13. Certain Relationships and Related Transactions, and Director Independence.
The information required by this Item is incorporated by reference to the Company’s Definitive Proxy Statement for the 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days of year end.

Item 14. Principal Accountant Fees and Services.
The information required by this Item is incorporated by reference to the Company’s Definitive Proxy Statement for the 2018 Annual Meeting of Stockholders to be filed with the SEC within 120 days of year end.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

EXHIBIT INDEX

Exhibit Number	Exhibit Title
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company’s Form 10-Q for the quarter ended September 30, 2007).
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Company’s Form 10-Q for the quarter ended September 30, 2009).
3.3	Amended and Restated Bylaws, dated December 9, 2014 (incorporated by reference to Exhibit 3.1 to the Company’s Form 8-K filed on December 10, 2014).
3.4	Second Amended and Restated Bylaws, dated October 11, 2017 (incorporated by reference to Exhibit 3.1 to the Company’s Form 8-K filed on October 17, 2017).
4.1	Form of Certificate of Common Stock (incorporated by reference to Appendix E to the Company’s Definitive Proxy Statement filed on September 27, 2001).
4.2	Registration Rights Agreement, dated as of July 26, 2016, by and among the Company, Donald Bramblett, and Mark Kieper (incorporated by reference to Exhibit 4.6 to the Company’s Registration Statement on Form S-3 (File No. 333-212864) filed on August 3, 2016).
10.1	2007 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.6 to the Company’s Form 10-K for the year ended December 31, 2007).
10.2	2010 Long-Term Incentive Plan (incorporated by reference to Appendix A to the Company’s Definitive Proxy Statement filed on July 13, 2010).
10.3	Non-Qualified Stock Option Agreement, dated April 8, 2011, between the Company and Steve Reeves (incorporated by reference to Exhibit 10.5 to the Company’s Form 10-Q for the quarter ended June 30, 2011).
10.4	Non-Qualified Stock Option Agreement, dated April 8, 2011, between the Company and John W. Chisholm (incorporated by reference to Exhibit 10.7 to the Company’s Form 10-Q for the quarter ended June 30, 2011).
10.5	Revolving Credit and Security Agreement dated as of September 23, 2011 (incorporated by reference to Exhibit 10.1 to the Company’s Form 8-K filed on September 26, 2011).
10.6	Guaranty dated September 23, 2011 (incorporated by reference to Exhibit 10.2 to the Company’s Form 8-K filed on September 26, 2011).
10.7	Security Agreement dated September 23, 2011 (incorporated by reference to Exhibit 10.3 to the Company’s Form 8-K filed on September 26, 2011).
10.8	Intellectual Property Security Agreement dated September 23, 2011 (incorporated by reference to Exhibit 10.4 to the Company’s Form 8-K filed on September 26, 2011).
10.9	Lien Subordination and Intercreditor Agreement dated as of September 23, 2011 (incorporated by reference to Exhibit 10.5 to the Company’s Form 8-K filed on September 26, 2011).
10.10	Second Amendment to Revolving Credit and Security Agreement dated as of November 12, 2012 (incorporated by reference to Exhibit 10.1 to the Company’s Form 8-K filed on November 14, 2012).
10.11	Third Amendment to Revolving Credit and Security Agreement dated as of December 14, 2012 (incorporated by reference to Exhibit 10.1 to the Company’s Form 8-K filed on December 17, 2012).
10.12	Fourth Amendment to Revolving Credit and Security Agreement dated as of December 27, 2012 (incorporated by reference to Exhibit 10.1 to the Company’s Form 8-K filed on December 28, 2012).
10.13	Amended and Restated Revolving Credit, Term Loan and Security Agreement dated May 10, 2013 (incorporated by reference to Exhibit 10.2 to the Company’s Form 8-K filed on May 13, 2013).
10.14	First Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement dated December 31, 2013 (incorporated by reference to Exhibit 10.1 to the Company’s Form 8-K filed on January 7, 2014).
10.15	

	2014 Long-Term Incentive Plan (incorporated by reference to Exhibit A to the Company's Definitive Proxy Statement filed on April 18, 2014).
10.16	Fifth Amended and Restated Service Agreement, dated as of April 15, 2014, between the Company, Protechnics II, Inc. and Chisholm Management, Inc. (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on April 21, 2014).
10.17	Letter Agreement, dated as of April 15, 2014, between the Company and John Chisholm (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed on April 21, 2014).

Exhibit Number	Exhibit Title
10.18	Second Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement dated December 5, 2014 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on December 10, 2014).
10.19	Employment Agreement, dated effective May 1, 2015 between the Company and Robert M. Schmitz (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed on June 4, 2015).
10.20	Third Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement dated June 19, 2015 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on June 24, 2015).
10.21	Fourth Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement dated July 21, 2015 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on July 23, 2015).
10.22	Employment Agreement, dated effective January 1, 2016 between the Company and Joshua A. Snively, Sr. (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed on January 7, 2016).
10.23	Fifth Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement dated effective March 31, 2016 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on May 3, 2016).
10.24	Form of Subscription Agreement, dated as of July 26, 2016 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on August 1, 2016).
10.25	Sixth Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement dated effective September 30, 2016 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on November 2, 2016).
10.26	Retirement Agreement, dated February 14, 2017, between Robert M. Schmitz and the Company (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on February 17, 2017).
10.27	Retirement Agreement, dated February 16, 2017, between Steve Reeves and the Company (incorporated by reference to Exhibit 10.2 to the Company's Form 8-K filed on February 17, 2017).
10.28	Letter Agreement, dated February 13, 2017, among the Company, Protechnics II, Inc. and Chisholm Management, Inc. amending the Fifth Amended and Restated Service Agreement among such parties (incorporated by reference to Exhibit 10.3 to the Company's Form 8-K filed on February 17, 2017).
10.29	Seventh Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement and Sixth Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated effective as of March 31, 2017 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on May 1, 2017).
10.30	Asset Purchase Agreement, dated May 2, 2017, by and among National Oilwell DHT, L.P., Dreco Energy Services ULC, and National Oilwell Varco, L.P., the buyers, Teledrift Company, Turbeco, inc., Flotek Technologies ULC, and Flotek Industries FZE, the sellers, and Flotek Industries, Inc (incorporated by reference to Exhibit 10.2 to the Company's Form 10-Q for the quarter ended June 30, 2017).
10.31	Eighth Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated effective as of June 7, 2017 (incorporated by reference to Exhibit 10.1 to the Company's Form 10-Q for the quarter ended September 30, 2017).
10.32	Ninth Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated effective as of July 1, 2017 (incorporated by reference to Exhibit 10.2 to the Company's Form 10-Q for the quarter ended September 30, 2017).
10.33	Tenth Amendment to Amended and Restated Revolving Credit, Term Loan and Security Agreement, dated effective as of September 29, 2017 (incorporated by reference to Exhibit 10.1 to the Company's Form 8-K filed on October 3, 2017).
10.34	Employment Agreement, dated effective April 1, 2016, between the Company and Robert Bodnar (incorporated by reference to Exhibit 10.4 to the Company's Form 10-Q for the quarter ended September 30, 2017).

10.35		Confidential Severance and Release Agreement, dated effective October 12, 2017, between the Company and Robert Bodnar (incorporated by reference to Exhibit 10.5 to the Company's Form 10-Q for the quarter ended September 30, 2017).
21	*	List of Subsidiaries.
23.1	*	Consent of Moss Adams LLP.
23.2	*	Consent of Hein & Associates LLP.
31.1	*	Rule 13a-14(a) Certification of Principal Executive Officer.
31.2	*	Rule 13a-14(a) Certification of Principal Financial Officer.
32.1	**	Section 1350 Certification of Principal Executive Officer.
32.2	**	Section 1350 Certification of Principal Financial Officer.
101.INS	+	XBRL Instance Document.

Exhibit Number	Exhibit Title
101.SCH +	XBRL Schema Document.
101.CAL +	XBRL Calculation Linkbase Document.
101.LAB +	XBRL Label Linkbase Document.
101.PRE +	XBRL Presentation Linkbase Document.
101.DEF +	XBRL Definition Linkbase Document.

*	Filed herewith.
**	Furnished with this Form 10-K, not filed.
+	Filed electronically with this Form 10-K.

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.

FLOTEK INDUSTRIES, INC.

By: /s/ JOHN W. CHISHOLM
John W. Chisholm
President, Chief Executive Officer and Chairman of the Board
Date: March 8, 2018

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	Title	Date
/s/ JOHN W. CHISHOLM John W. Chisholm	President, Chief Executive Officer, and Chairman of the Board (Principal Executive Officer)	March 8, 2018
/s/ H. RICHARD WALTON H. Richard Walton	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 8, 2018
/s/ KENNETH T. HERN Kenneth T. Hern	Director	March 8, 2018
/s/ JOHN S. REILAND John S. Reiland	Director	March 8, 2018
/s/ L.V. “BUD” MCGUIRE L.V. “Bud” McGuire	Director	March 8, 2018
/s/ L. MELVIN COOPER L. Melvin Cooper	Director	March 8, 2018
/s/ CARLA S. HARDY Carla S. Hardy	Director	March 8, 2018
/s/ TED D. BROWN Ted D. Brown	Director	March 8, 2018
/s/ MICHELLE M. ADAMS Michelle M. Adams	Director	March 8, 2018